

A1-F18AC-460-330

1 November 1997

Change 1 - 1 July 2000

TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE SYSTEM MAINTENANCE WITH IPB

FUEL SYSTEM

NAVY MODEL F/A-18A AND F/A-18B 161353 AND UP

N00421-98-D-1339

This volume is one of four volumes and is incomplete without A1-F18AC-460-300, A1-F18AC-460-310, A1-F18AC-460-320. This volume contains WP115 00 through WP171 00.

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NUMERICAL INDEX OF EFFECTIVE WORK PACKAGES/PAGES

List of Current Changes

Original 0 1 Nov 97 Change 1 1 Jul 00

Only those work packages/pages assigned to the manual are listed in this index. Insert Change 1, dated 1 July 2000. Dispose of superseded work packages/pages. Superseded classified work packages/pages shall be destroyed in accordance with applicable security regulations. If changed pages are issued to a work package, insert the changed pages in the applicable work package. The portion of text affected in a change or revision is indicated by change bars or the change symbol "R" in the outer margin of each column of text. Changes to illustrations are indicated by pointing hands, change bars, or MAJOR CHANGE symbols. Changes to diagrams may be indicated by shaded borders.

WP Number	Title	WP Number	Title
Title		123 00	Wing Motive Flow Pilot Float Valve (5VAU528 or 5VAV529), Internal Fuel Transfer System
Page A	Numerical Index of Effective Work Packages/Pages		
TPDR-1	List of Technical Publications Deficiency Reports Incorporated	124 00	Wing Transfer Jet Ejector (5BAU548 or 5BAV549) and Motive Flow Shutoff Valve (5VAU543 or 5VAV544) and Wing Transfer Jet Ejector Strainer (5FAU685 or 5FAV686), Internal Fuel Transfer System
HMWS	Warnings Applicable to Hazardous Materials		
115 00	No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608), Internal Fuel Transfer System	124 01	Fuel Transfer Tube and Strainer (5FAU681 or 5FAV682), Internal Transfer System, 161735 thru 161924
115 01	No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608), Internal Fuel Transfer System, 161353 thru 161715 Before F/A-18 AFC 18 and F/A-18 AFC 53	125 00	No. 4 Fuel Tank Vent Scavenge Jet Ejector (5BAP559 or 5BAR560), No. 4 Fuel Tank Vent Scavenge Jet Ejector Support, Internal Fuel Transfer System
115 02	No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608), Internal Fuel Transfer System, 161716 and Up; Also 161353 thru 161715 after F/A-18 AFC 18 and F/A-18 AFC 53	126 00	Vent Tank Scavenge Check Valve (5VAS602 or 5VAT612), Internal Fuel Transfer System
116 00	No. 4 Fuel Tank Transfer Shutoff Valve and Pilot Valve (5VAP565 and 5VAP519), Internal Fuel Transfer System	127 00	Scavenge Pump Inlet Screen (5FAS604), Internal Fuel Transfer System
116 01	No. 4 Fuel Tank Transfer Shutoff Valve and Pilot Valve (5VAP565 and 5VAP519), Internal Fuel Transfer System, 161353 thru 161761 Before F/A-18 AFC 53	128 00	Fuel Level Control Selector Valve (5VAG579), Internal Fuel Transfer System
116 02	No. 4 Fuel Tank Transfer Shutoff Valve and Pilot Valve (5VAP565 and 5VAP519), Internal Fuel Transfer System, 161924 and Up; Also 161353 thru 161761 After F/A-18 AFC 53	129 00	No. 1 Fuel Tank Transfer Precheck Valve (5VAP606), Internal Fuel Transfer System, 161353 thru 161965 Before F/A-18 AFC 53
116 03	No. 4 Fuel Tank Transfer Control Valve (5L-R167), Internal Fuel Transfer System, 161924 and Up; Also 161353 thru 161761 After F/A-18 AFC 53	130 00	No. 4 Fuel Tank Transfer Precheck Valve (5VAP589), Internal Fuel Transfer System, 161353 thru 161965 Before F/A-18 AFC 53
117 00	No. 4 Fuel Tank Transfer Jet Ejector (5BAP567), Internal Fuel Transfer System	131 00	No. 2 Fuel Tank Wash Filter (5FAP632), Engine Fuel Supply System
117 01	No. 4 Fuel Tank Transfer Jet Ejector (5BAP567), Internal Fuel Transfer System, 161353 thru 161982 Before F/A-18 IAFC 017, Part 1 and Part 2	131 01	No. 2 Fuel Tank Wash Filter (5FAP632), Engine Fuel Supply System, 161353 thru 161715 Before F/A-18 AFC 18 and F/A-18 AFC 53
117 02	No. 4 Fuel Tank Transfer Jet Ejector (5BAP567), Internal Fuel Transfer System, 161983 and Up; Also 161353 thru 161982 After F/A-18 IAFC 017 Part 1 and Part 2	131 02	No. 2 Fuel Tank Wash Filter (5FAP632), Engine Fuel Supply System, 161716 thru 161761 Before F/A-18 AFC 18 and F/A-18 AFC 53
118 00	Deleted	131 03	No. 2 Fuel Tank Wash Filter (5FAP632), Engine Fuel Supply System, 161924 and Up; Also 161353 thru 161761 After F/A-18 AFC 18 and F/A-18 AFC 53
119 00	Wing Fuel Gravity Check Valve (5VAP587 or 5VAR588), Internal Fuel Transfer System	132 00	No. 3 Fuel Tank Wash Filter (5FAP633), Engine Fuel Supply System
120 00	Engine Transfer Motive Flow Check Valve (5VAP563 or 5VAR564), Internal Fuel Transfer System	132 01	No. 3 Fuel Tank Wash Filter (5FAP633), Engine Fuel Supply System, 161353 thru 161715 Before F/A-18 AFC 18 and F/A-18 AFC 53
121 00	Engine Motive Flow Check Valve (5VAP561 or 5VAR562), Internal Fuel Transfer System	132 02	No. 3 Fuel Tank Wash Filter (5FAP633), Engine Fuel Supply System, 161716 thru 161761 Before F/A-18 AFC 18 and F/A-18 AFC 53
122 00	Wing Damage Fuel Shutoff Valve (5L-R110), Internal Fuel Transfer System	132 03	No. 3 Fuel Tank Wash Filter (5FAP633), Engine Fuel Supply System, 161924 and Up; Also 161353 thru 161761 After F/A-18 AFC 18 and F/A-18 AFC 53

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133 00	No. 2 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP599), Engine Fuel Supply System	148 00	Internal Fuel Tanks Air Pressure Regulators (5L-T104) Fuel Pressurization and Vent System
133 01	No. 2 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP599), Engine Fuel Supply System, 161353 thru 161715 Before F/A-18 AFC 18 and F/A-18 AFC 53	149 00	Air Pressure Switch (5S-T106), Fuel Pressurization and Vent System
133 02	No. 2 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP599), Engine Fuel Supply System, 161716 thru 161761 Before F/A-18 AFC 18 and F/A-18 AFC 53	150 00	Pressurization System Air Pump (5BAS511 or 5BAT512), Fuel Pressurization and Vent System
133 03	No. 2 Fuel Tank Engine Fuel Turbine Boost Pump (5BAP679), Engine Fuel Supply System, 161924 and Up; Also 161353 thru 161761 After F/A-18 AFC 18 and F/A-18 AFC 53	151 00	Bleed Air Check Valve (5VAT506), Fuel Pressurization and Vent System
134 00	No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591), Engine Fuel Supply System	151 01	Bleed Air Check Valve (5VAT506), Fuel Pressurization and Vent System, 161353 thru 161741
134 01	No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591), Engine Fuel Supply System, 161353 thru 161715 Before F/A-18 AFC 18 and F/A-18 AFC 53	151 02	Bleed Air Check Valve (5VAT506), Fuel Pressurization and Vent System, 161742 and Up
134 02	No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591), Engine Fuel Supply System, 161716 thru 161761 Before F/A-18 AFC 18 and F/A-18 AFC 53	152 00	Internal Air Pressurization Check Valve (5VAT513), Fuel Pressurization and Vent System
134 03	No. 3 Fuel Tank Engine Fuel Turbine Boost Pump (5BAR680), Engine Fuel Supply System, 161924 and Up; Also 161353 thru 161761 After F/A-18 AFC 18 and F/A-18 AFC 53	153 00	Bleed Air Check Valve (5VAT507), Fuel Pressurization and Vent System
135 00	Engine Fuel Shutoff Valve (5B-P072 or 5B-R070), Engine Fuel Supply System	154 00	No. 1 Fuel Tank Climb Vent Check Valve (5VAP531), Fuel Pressurization and Vent System
136 00	Fuel Crossfeed Shutoff Valve (5B-P071), Engine Fuel Supply System	155 00	No. 1 Fuel Tank Dive Vent Check Valve (5VAP530), Fuel Pressurization and Vent System
136 01	Fuel Crossfeed Tube, Internal Fuel Transfer System	156 00	Dive Vent Check Valve (5VAP555, 5VAP582, 5VAP593), Fuel Pressurization and Vent System
137 00	Fuel Feed Line Temperature Sensor (5A-P111 or 5A-R112), Engine Fuel Supply System	156 01	Fuel Tank Inverted Flight Vent Check Valve (5VAR677 or 5VAR678), Fuel Pressurization and Vent System, 161716 and Up; Also 161353 thru 161715 After F/A-18 AFC 18 and F/A-18 AFC 53
138 00	Motive Flow/Boost Pump (5BAT514 or 5BAS515), Engine Fuel Supply System	157 00	Siphon Breaker Check Valve (5VAS545), Fuel Pressurization and Vent System
138 01	Heat Exchangers Wash Filter (5FAP647 or 5FAR648), Engine Fuel Supply System	158 00	Vent Line Flame Arrestor (5MPS504 or 5MPT505), Fuel Pressurization and Vent System
139 00	Fuel Boost Pressure Switch (5S-P113 or 5S-R114), Engine Fuel Supply System, 163119 and Up; Also 161353 thru 161924 Before F/A-18 IAF 056 or 161353 thru 16311B after F/A-18 AFC 70	159 00	Vertical Stabilizer Vent Tank Fuel (5A-S149 or 5A-T150), Fuel Pressurization and Vent System
140 00	Engine Fuel Coupling Check Valve (5VAP639 or 5VAR640), Engine Fuel Supply System	160 00	Fuel Quantity Indicator (5A-H013), Fuel Quantity System
141 00	Fuel Dump Valve (5B-P069), Fuel Dump System	161 00	Fuel Quantity Repeater Indicator (5A-K015), Fuel Quantity System
142 00	Dump Line Automatic Drain Valve (5VAS518), Fuel Dump System	162 00	Fuel Quantity Gaging Intermediate Device (5A-F014), Fuel Quantity System
143 00	Dump Line Flame Arrestor (5MPS502 or 5MPT503), Fuel Dump System	163 00	No. 1 Fuel Tank Fuel Quantity Transmitters (5A-F028 or 5A-F029), Fuel Quantity System, F/A-18A
144 00	Hot Fuel Recirculation Check Valve (5VAP585 or 5VAR584), Hot Fuel Recirculation System	164 00	No. 1 Fuel Tank Fuel Quantity Transmitters (5A-E028 or 5A-F029), Fuel Quantity System, F/A-18B
144 01	Fuel System Restrictors, Fuel Storage System	165 00	No. 2 Fuel Tank Fuel Quantity Transmitter (5A-R030), Fuel Quantity System
144 02	Fuel/Air Heat Exchanger or Manifold (5MPP670 or 5MPR671), Hot Fuel Recirculation System, 161520 and Up; Also 161353 thru 161519 After F/A-18 AFC 21	166 00	No. 3 Fuel Tank Fuel Quantity Transmitter (5A-R031), Fuel Quantity System
145 00	Fuel/Oil Heat Exchanger Check Valve (5VAS523 or 5VAT524) or Crossfeed Manifold, Hot Fuel Recirculation System	167 00	No. 4 Fuel Tank Fuel Quantity Transmitters (5A-R032, 5A-R033 or 5A-R034), Fuel Quantity System
146 00	Fuel Diverter Valve (5L-P119 or 5L-R118), Hot Fuel Recirculation System	168 00	Inboard Wing Fuel Quantity Transmitter (5A-U039 or 5A-V043), Fuel Quantity System
147 00	Ground Air Pressurization Connector or Filter (5PAP636 or 5FAP638), Fuel Pressurization and Vent System	169 00	Center Wing Fuel Quantity Transmitter (5A-U038 or 5A-V042), Fuel Quantity System
		170 00	Wing Fuel Quantity Transmitter (5A-U037 or 5A-V041), Fuel Quantity System
		171 00	Low Level Sensing Control Unit (5A-E053), Fuel Quantity Low Level Warning System

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116 02		2 Blank0	144 00		1 - 40
1 - 70	132 01		1 - 90	160 00	
8 Blank0	1 - 100	10 Blank0	1 - 40
116 03		132 02		144 01		161 00	
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1 - 80	12 Blank0	151 00		14 Blank0
123 00		134 02		10	169 00	
1 - 50	1 - 110	2 Blank0	1 - 140
6 Blank0	12 Blank0	151 01		170 00	
124 00		134 03		1 - 50	1 - 140
1 - 80	1 - 160	6 Blank0	171 00	
124 01		135 00		151 02		1 - 60
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125 00		136 00		6 Blank0		
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127 00							
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LIST OF TECHNICAL PUBLICATIONS DEFICIENCY REPORTS INCORPORATED

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

FUEL SYSTEM

This TPDR page supersedes TPDR page, dated 1 November 1997.

1. The TPDRs listed below have been incorporated in this issue.













<u>Identification No./ QA Sequence No.</u>	<u>Location</u>
VFA-97/63923-99-0011	WP154 00, pg 5, item 3
NWTS China Lake/39787-99-0046	WP167 00, pg 1, p 1
	WP167 00, pg 2, p 2

WARNINGS APPLICABLE TO HAZARDOUS MATERIALS

Warnings for hazardous materials listed in this manual are designed to warn personnel of hazards associated with such items when they come in contact with them by actual use. Additional information related to hazardous materials is provided in OPNAVINST 5100.23, Navy Occupational Safety and Health (NAVOSH) Program Manual, NAVSUPINST 5100.27, Navy Hazardous Material Control Program, and the DOD 6050.5, Hazardous Materials Information System (HMIS) series publications. For each hazardous material used within the Navy, a material safety data sheet (MSDS) is required to be provided and available for review by users. Consult your local safety and health staff concerning any questions on hazardous chemicals, MSDS's, personal protective equipment requirements, and appropriate handling and emergency procedures and disposal guidance.

Complete warnings for hazardous materials referenced in this manual are identified by use of an icon, nomenclature and specification or part number of the material, and a numeric identifier. The numeric identifiers have been assigned to the hazardous materials in the order of their appearance in the manual. Each hazardous material is assigned only one numeric identifier. Repeated use of a specific hazardous material references the numeric identifier assigned at its initial appearance. The approved icons and their applications are shown below in Explanation of Hazardous Symbols.

In the text of the manual, the caption **WARNING** will not be used for hazardous materials. Such warnings will be identified by an icon and numeric identifier. The material nomenclature will also be provided. The user is directed to refer to the corresponding numeric identifier listed in this WP under the heading HAZARDOUS MATERIALS WARNINGS for the complete warning applicable to the hazardous material.

Biohazard		Fire	
Breathing Hazard		Highly Toxic	
Corrosive (Caustic or Acidic)		Ingestion Hazard	
Cryogenic		Oxidizer	
Explosive		Radiation	
Eye Protection		Skin Hazard	

EXPLANATION OF HAZARDOUS SYMBOLS



The abstract symbol shows a material that may contain bacteria or viruses that present a health hazard.



The symbol of a human figure in a cloud shows that breathing this material can present a health hazard.



The symbol of drops of a liquid burning a hand shows a material that causes burns to human skin or tissue.



The symbol of a hand in a block of ice shows a material is so cold it will burn your skin on contact.



The rapidly expanding symbol shows that the material may explode if subjected to high temperature, sources of ignition, or high pressure.



The symbol of a person wearing goggles shows a material that can injure your eyes.



The symbol of a fire shows that a material can ignite and burn you.



The symbol of a skull and crossbones shows a material that is highly toxic and can be a danger to life and health.



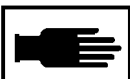
The symbol of a liquid entering the mouth shows that eating or drinking this material can cause a health hazard.



The symbol of an "O" with a flame shows a material that will promote fire and cannot be stored near flammable or organic materials.















The symbol of three circular wedges shows that the material emits radioactive energy and can injure human tissue or organs.














The hand symbol shows a material that can irritate the skin or enter the body through the skin and cause a health hazard.

HAZARDOUS MATERIALS WARNINGS

Index	Material	Warning
1	Petrolatum, Technical, VV-P-236	Technical Petrolatum, VV-P-236, is an eye irritant and upon exposure may cause skin irritation. May cause stomach/intestinal irritation upon ingestion. Avoid extreme heat and strong oxidizing agents. Protection: neoprene gloves and chemical goggles.
	 	
2	Isopropyl Alcohol, TT-I-735	Isopropyl Alcohol, TT-I-735 is highly flammable. Do not use synthetic wiping cloths due to possible electrostatic discharge and ignition. Isopropyl alcohol is also toxic to the skin, eyes, and respiratory tract. Skin and eye protection are required. Avoid repeated or prolonged contact.
	   	
3	Sealing Compound, MIL-S-8802	Sealing Compound, MIL-S-8802, is flammable and toxic to eyes, skin, and respiratory tract. Keep away from open flames or other sources of ignition. Prolonged breathing of vapors from organic solvents or materials containing organic solvents is dangerous. Rubber gloves shall be used. Use only in well-ventilated areas. Wash hands thoroughly with soap and water before eating, drinking, or smoking. Contains chromates; follow approved toxic waste disposal procedures.
	   	
4	Corrosion Resistant, KIT14-2	Corrosion Resistant, KIT14-2, will cause serious injury if not handled properly. Wear rubber gloves, rubber apron and protective face shield. If material contacts the skin or eyes, flush the area immediately with water and report to medical facility.
	 	

HAZARDOUS MATERIALS WARNINGS (Cont)

Index	Material	Warning
5	Methyl Ethyl Ketone, TT-M-261	Methyl Ethyl Ketone, TT-M-261, is flammable. Do not use near open flames, near welding areas, or on hot surfaces. Do not smoke when using it, and do not use it where others are smoking. Contact with liquid or vapor can cause skin irritation, dermatitis and drowsiness. If there is any prolonged skin contact, wash contacted area with soap and water. Remove solvent saturated clothing. If vapors cause drowsiness, go to fresh air. If irritation persists, get medical attention. When handling liquid at air-exhausted workbench, wear approved gloves, goggles and long sleeves. When handling liquid or liquid-soaked cloth in open unexhausted area, wear approved respirator, gloves and goggles. Dispose of liquid-soaked rags in approved metal container. Metal containers of solution must be grounded to maintain electrical continuity.
	  	
6	Adhesive, EA934	Adhesive, EA934, is toxic. Avoid breathing of vapors. Avoid contact with skin or eyes. Wear gloves and goggles while handling. If eye contact is made, wash immediately with large amount of water. If skin contact is made, wash immediately with soap and water.
	   	
7	Jet Fuel, JP-4 and JP-5, MIL-T-5624, JP-8, MIL-T-83133	Jet Fuel (JP-4 and JP-5, MIL-T-5624; JP-8, MIL-T-83133) is flammable. Do not use near open flames, near welding areas or on hot surfaces. Do not smoke when using it and do not use it where others are smoking. Contact of skin with liquid can irritate skin. Contact of eyes with liquid can cause severe irritation and blurred vision. Inhalation of vapor may cause irritation, headache, nausea, and dizziness. If liquid contacts eyes, flush eyes thoroughly with water. Immediately remove fuel-saturated clothing. If vapors cause dizziness, go to fresh air. If liquid is swallowed, do not try to vomit. Get medical attention. When handling large quantities of liquid (more than one gallon) at an unexhausted workbench, wear approved respirator and goggles or face shield. Dispose of liquid-soaked rags in approved metal container. Metal containers of fuel must be grounded to maintain electrical continuity.
	   	

HAZARDOUS MATERIALS WARNINGS (Cont)

Index	Material	Warning
8	Cleaning Compound, MIL-C-38736	Cleaning Compound, MIL-C-38736, irritates skin, nose, throat and respiratory tract. Avoid repeated/prolonged contact. Avoid heat, sparks, flames, and strong oxidizing agents. Keep away from open flames or other sources of ignition. Use only in well-ventilated areas. Protection: Full-face atmosphere supplying respirator, chemical resistant gloves and chemical goggles.



ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 3 FUEL TANK GRAVITY FEED CHECK VALVE (5VAP608)

INTERNAL FUEL TRANSFER SYSTEM

Title	WP Number
No. 3 Fuel Tank Gravity Feed Check Valve - 161353 THRU 161761 BEFORE F/A-18 AFC 18 AND F/A-18 AFC 53	115 01
No. 3 Fuel Tank Gravity Feed Check Valve and Pilot Valve - 161716 AND UP; ALSO 161353 THRU 161715 AFTER F/A-18 AFC 18 AND F/A-18 AFC 53	115 02

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 3 FUEL TANK GRAVITY FEED CHECK VALVE (5VAP608)

INTERNAL FUEL TRANSFER SYSTEM

EFFECTIVITY: 161353 THRU 161715 BEFORE F/A-18
AFC 18 AND F/A-18 AFC 53

Reference Material

Fuel System	A1-F18AC-460-300
No. 3 Fuel Tank Access Cover	WP006 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer and Engine Fuel Supply System Test	WP012 00
Line Maintenance Procedures	A1-F18AC-LMM-000

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Illustrated Parts Breakdown	2
Installation	2
Removal	2

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 18	-	Incorporation of Fuel Turbine Boost Pump/ Sealing of Raised Baffle in Fuel Tanks 2 and 3 (ECP MDA-F/A-18-00077C1/C2)	15 Jul 86	-
F/A-18 AFC 53	-	Elimination of Tanks 1 and 4 Sneak Circuit, Tank 4 Motive Flow Shut Off Valve, and Raised Inverted Baffle (ECP MDA-F/A-18-00055/C1)	15 Jul 86	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (2)	MS29513-230
Packing	MS29613-334
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove coupling (3, figure 1, detail A), packings (2), and tube (1).
- c. Disconnect tube (6, detail B).
- d. Remove and loosen bolts (8 and 9) with washers as required to allow for removal of web (7).
- e. Remove web (7) and attaching parts.
- f. Disconnect nut assembly (15, detail C), then remove check valve (feed assembly) (14).
- g. Remove packing (16).

2. INSTALLATION.

- a. Do preparation for component installation (WP013 00).



Petrolatum

1

b. Lubricate new packings with petrolatum before installation.

c. Prepare mating surfaces of check valve (14, figure 1, detail C) nut assembly (15) and bulkhead connector for electrical bond (A1-F18AC-LMM-000).

d. Install packing (16), nut assembly (15), and check valve (feed assembly) (14). Handtighten nut (15).

e. Inspect for and remove foreign objects from below baffle area.

f. Install web (7, detail B) and attaching parts.

g. Install and tighten bolts (8 and 9) with washers as required.

h. Connect tube (6).

i. Install packings (2, detail A), coupling (3), and tube (1).

j. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)

k. Install no. 3 fuel tank access cover (WP006 00).

l. Connect utility and emergency battery connectors (WP013 00).

m. Do an internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

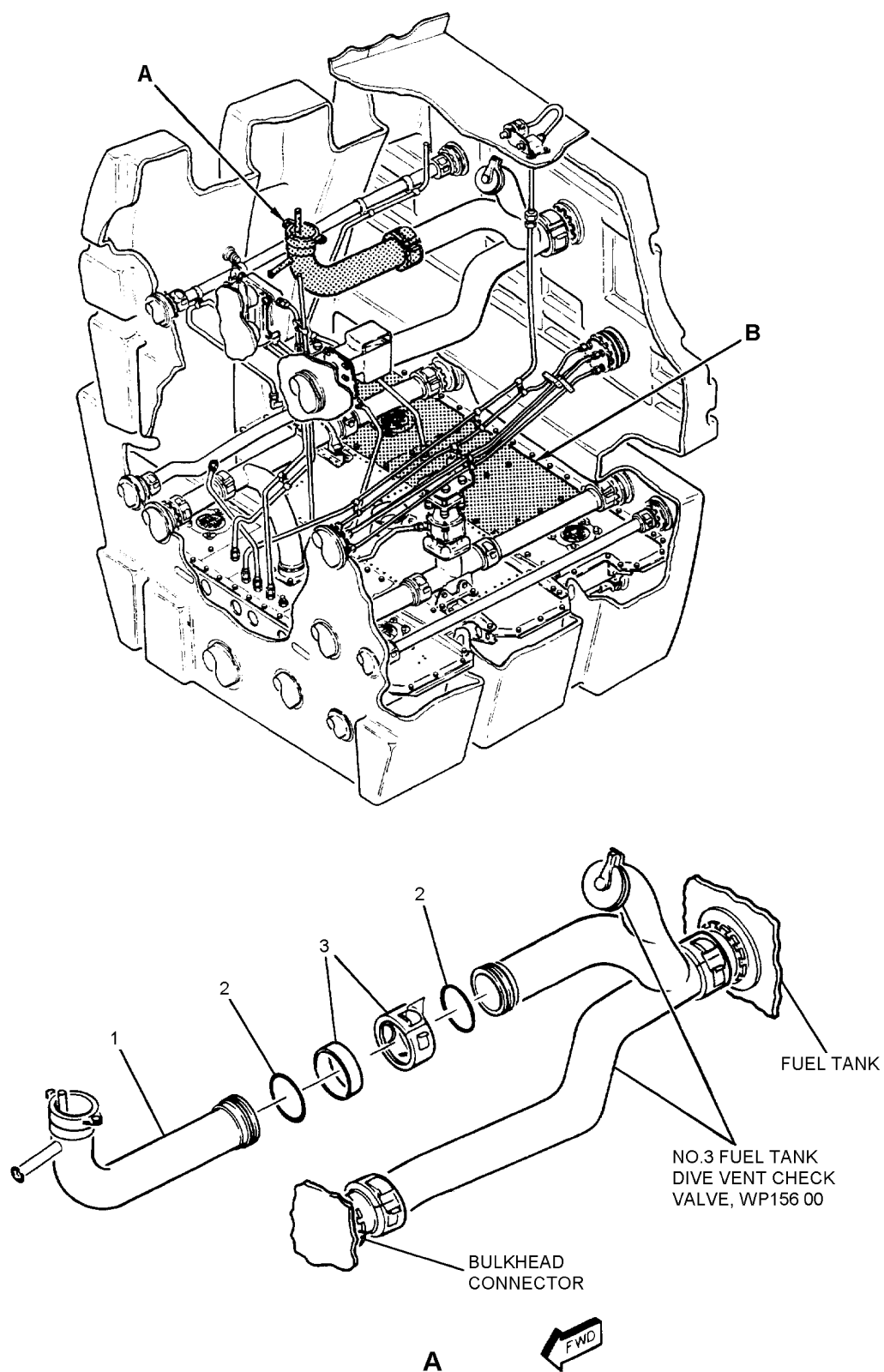


Figure 1. No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608) (Sheet 1)

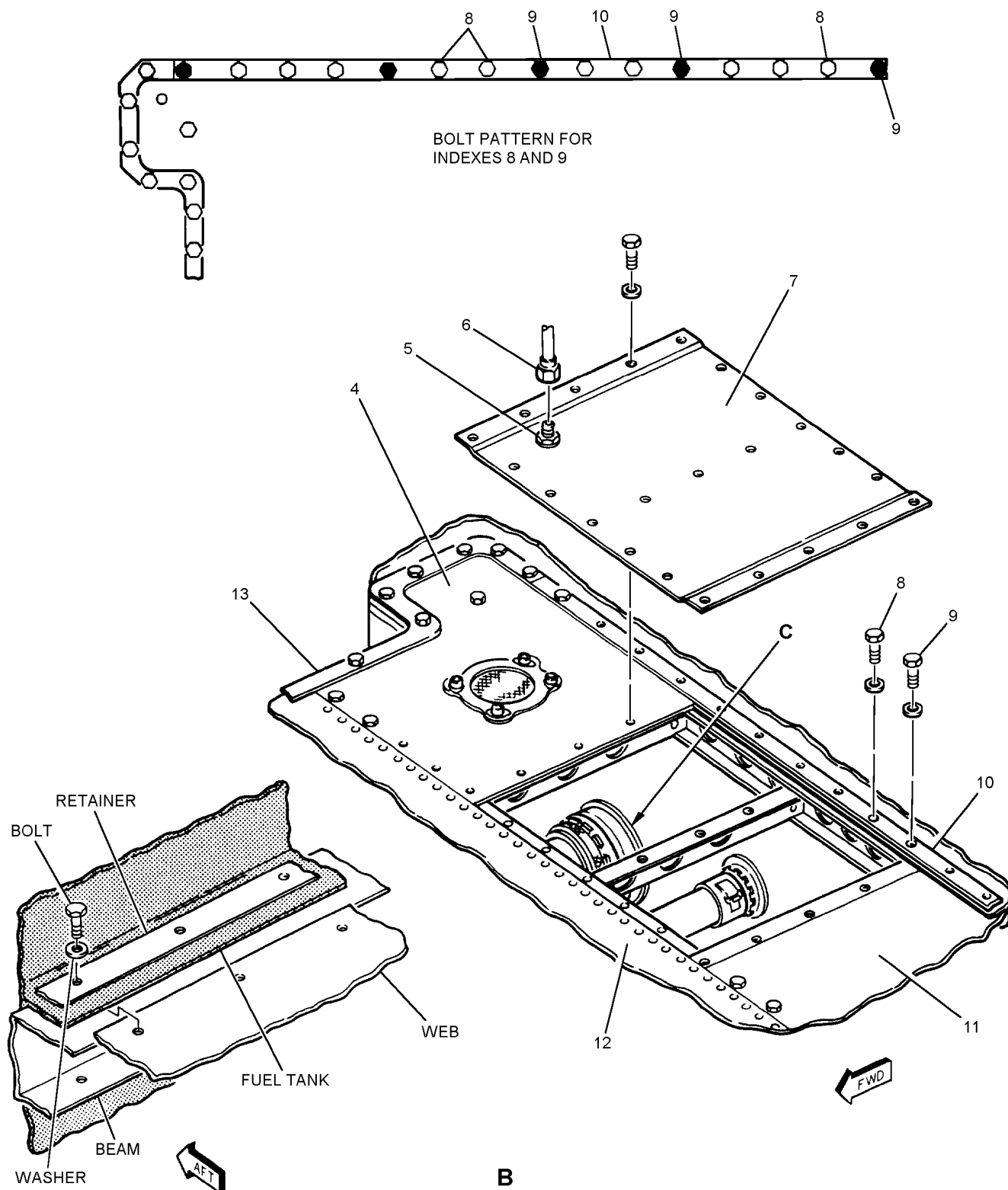


Figure 1. No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608) (Sheet 2)

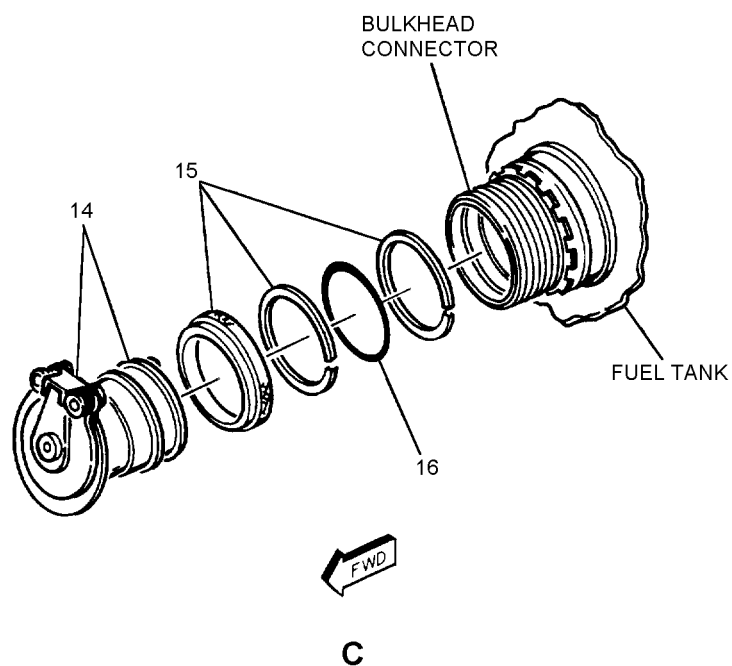


Figure 1. No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		NO. 3 FUEL TANK GRAVITY FEED									
		CHECK VALVE (5VAP608)									
1	74A586381-1001	.	TUBE ASSY - CLIMB VENT, FUEL	.					1		XBOOO
		TANK NO. 3 (76301)									
	NS103597-02	.	NUT, SELF-LOCKING, PLATE	.					2	*	PAOZZ
		(80539) (MCDONNELL SPEC									
		ST3M470C3M) (USE WITH INDEX 1)									
	F10965-1-3	.	NUT, SELF-LOCKING, PLATE	.					2	*	PAOZZ
		(72962) (MCDONNELL SPEC									
		ST3M470C3M) (USE WITH INDEX 1)									
	F29339-01-3	.	NUT, SELF-LOCKING, PLATE	.					2	*	PAOZZ
		(15653) (MCDONNELL SPEC									
		ST3M470C3M) (USE WITH INDEX 1)									
	MS20426AD3 #	.	RIVET (AP)	.					2		-
2	MS29513-230	.	PACKING	.					2		PAOZZ
3	W901K40DE	.	COUPLING, CLAMP, GROOVED	.					1		PAOZZ
		(79326) (MCDONNELL SPEC									
		7M765-40D) (INCLUDES SLEEVE)									
	14J12-40A	.	COUPLING, CLAMP, GROOVED	.					1		PAOZZ
		(24984) (MCDONNELL SPEC									
		7M765-40D) (INCLUDES SLEEVE)									
	W901F40DE	.	COUPLING, CLAMP, GROOVED	.					1	*	PAOZZ
		(79326) (MCDONNELL SPEC									
		7M550-40D) (INCLUDES SLEEVE)									
4	74A586303-2335	.	WEB ASSY (76301) (FOR REPAIR	.					1		XBOOO
		SEE WP024 04)									
5	7M637BT-6D	.	NIPPLE, TUBE (76301)	.					1		PAOZZ
	AN832-6D	.	NIPPLE	.					1	*	PAOZZ
6	74A586314-1001	.	TUBE ASSEMBLY, METAL - VENT	.					1		MGOZZ
		AFT, INVERTED FLT COMPT,									
		TK 3 (76301)									
7	74A586303-2533	.	SKIN ASSY (WEB) (76301)	.					1		XBOZZ
	NAS673V4	.	BOLT (AP)	.					AR		PAOZZ
	AN960JD10L	.	WASHER (AP)	.					AR		PAOZZ
8	NAS673V4	.	BOLT	.					AR		PAOZZ
	AN960JD10L	.	WASHER (USE WITH INDEX 9)	.					AR		PAOZZ
9	NAS673V6	.	BOLT	.					AR		PAOZZ
	AN960JD10L	.	WASHER (USE WITH INDEX 10)	.					AR		PAOZZ
10	74A586303-2375	.	RETAINER (AFT) (76301)	.					1		XBOZZ
11	74A586303-2345	.	WEB ASSY (76301) (FOR REPAIR	.					1		XBOOO
		SEE WP024 04)									
12	74A586303-2531	.	PANEL ASSY, CENTER (76301)	.					1		XBOOO
		(FOR REPAIR SEE WP024 04)									
13	74A586303-2327	.	RETAINER (76301)	.					1		XBOZZ
14	74A585002-2003	.	FEED ASSEMBLY, FUEL (NO. 3	.					1		PAOZZ
		FUEL TANK GRAVITY FEED									
		CHECK VALVE) (76301)									
		(5VAP608)									
	NAS1802-06-7	.	SCREW (USE WITH INDEX 14)	.					2		PAOZZ
	AN960JD6L	.	WASHER (USE WITH INDEX 14)	.					2		PAOZZ
	NAS1291C06M	.	NUT (USE WITH INDEX 14)	.					2		PAOZZ
15	W702-40D	.	NUT ASSEMBLY, TUBE COUPLING	.					1	*	PAOZZ
		(79326) (MCDONNELL SPEC ST7M191-40D)									
		(INCLUDES NUT AND 2 WASHERS)									
	12H72-40D	.	SEE ABOVE (24984)	.					1	*	PAOZZ

Figure 1. No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
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16	MS29513-334	. PACKING	1		PAOZZ
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* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED
AT INSTALLATION.

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 3 FUEL TANK GRAVITY FEED CHECK VALVE (5VAP608)

INTERNAL FUEL TRANSFER SYSTEM

EFFECTIVITY: 161716 AND UP; ALSO 161353 THRU 161715
AFTER F/A-18 AFC 18 AND F/A-18 AFC 53

Reference Material

Fuel System	A1-F18AC-460-300
No. 3 Fuel Access Cover	WP006 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer and Engine Fuel Supply System Test	WP012 00
Line Maintenance Procedures	A1-F18AC-LMM-000

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Removal	2

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 18	-	Incorporation of Fuel Turbine Boost Pump/ Sealing of Raised Baffle in Fuel Tanks 2 and 3 (ECP MDA-F/A-18-00077C1/C2)	15 Jul 86	-
F/A-18 AFC 53	-	Elimination of Tanks 1 and 4 Sneak Circuit, Tank 4 Motive Flow Shut Off Valve and Raised Inverted Baffle (ECP MDA-F/A-18-00055/C1)	15 Jul 86	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (4)	MS29513-214
Packing (6)	MS29513-226
Packing (6)	MS29513-230
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove couplings (3, figure 1, detail A), packings (2), and tube (1).
- c. Remove couplings (3), packings (2), and main vent assembly (4).
- d. Remove probe guide (11, detail B), bolts (12), and attaching parts.
- e. Disconnect tube (10, detail C) and rotate tube away from work area.
- f. Remove coupling (7), packings (6), and rotate tube (5) away from work area.
- g. Remove tube (24, detail D).
- h. Remove couplings (14) and tube (15).
- i. Disconnect tube (19) and clamp (25, detail G) and remove attaching parts.
- j. Remove coupling (20, detail D), clamp (17), and manifold (16) with attaching parts.
- k. Carefully remove panel (27, detail E) and attaching parts with defuel valve attached.
- l. Remove panel (28) and attaching parts.
- m. Remove stiffener (29) and attaching parts.
- n. Remove coupling (32, detail F).

- o. Disconnect nut (34), then remove check valve (feed assembly) (30).

2. INSTALLATION.

- a. Do preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings with petrolatum before installation.
- c. Prepare mating surfaces of check valve (30, figure 1, detail F), tube (33), nut assembly (34), and bulkhead connector/retainer for electrical bond (A1-F18AC-LMM-000).
- d. Install packing (35), nut (34), and check valve (feed assembly) (30). Handtighten nut (34).
- e. Install packings (31) and coupling (32).
- f. Install stiffener (29, detail E) and attaching parts.
- g. Install panel (28) and attaching parts.
- h. Inspect for and remove foreign objects from below baffle area. (QA)
- i. Carefully position panel (27) with defuel valve attached and install attaching parts.
- j. Prepare mating surfaces of manifold (16, detail D), attaching parts, and baffle for electrical bonding (A1-F18AC-LMM-000).
- k. Position manifold (16) and install packings (13), couplings (14 and 20), clamp (17), and attaching parts.
- l. Connect tube (19).
- m. Connect clamp (25, detail G) to bracket (26) and install attaching parts.
- n. Position tube (15) and install packings (13) and couplings (14).
- o. Install tube (24).

p. Install packings (6, detail C), couplings (7), and connect tube (5).

q. Connect tube (10).

r. Install probe guide (11, detail B), bolts (12), and attaching parts.

s. Install packings (2, detail A), coupling (3), and main vent assembly (4).

t. Install tube (1), packings (2), and coupling (3).

u. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)

v. Install no. 3 fuel tank access cover (WP006 00).

w. Connect utility and emergency battery connectors per WP013 00.

x. Do an internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

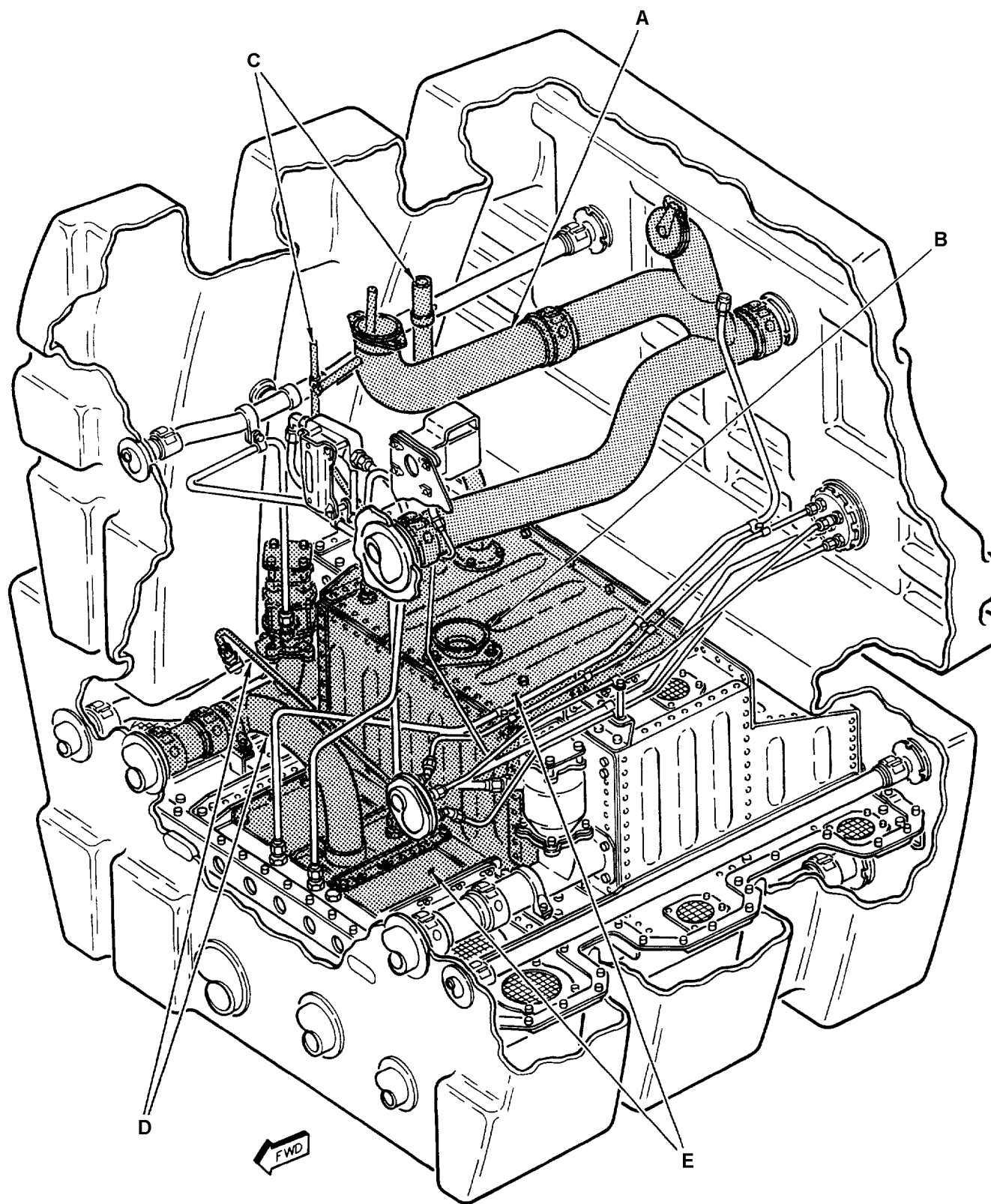


Figure 1. No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608) (Sheet 1)

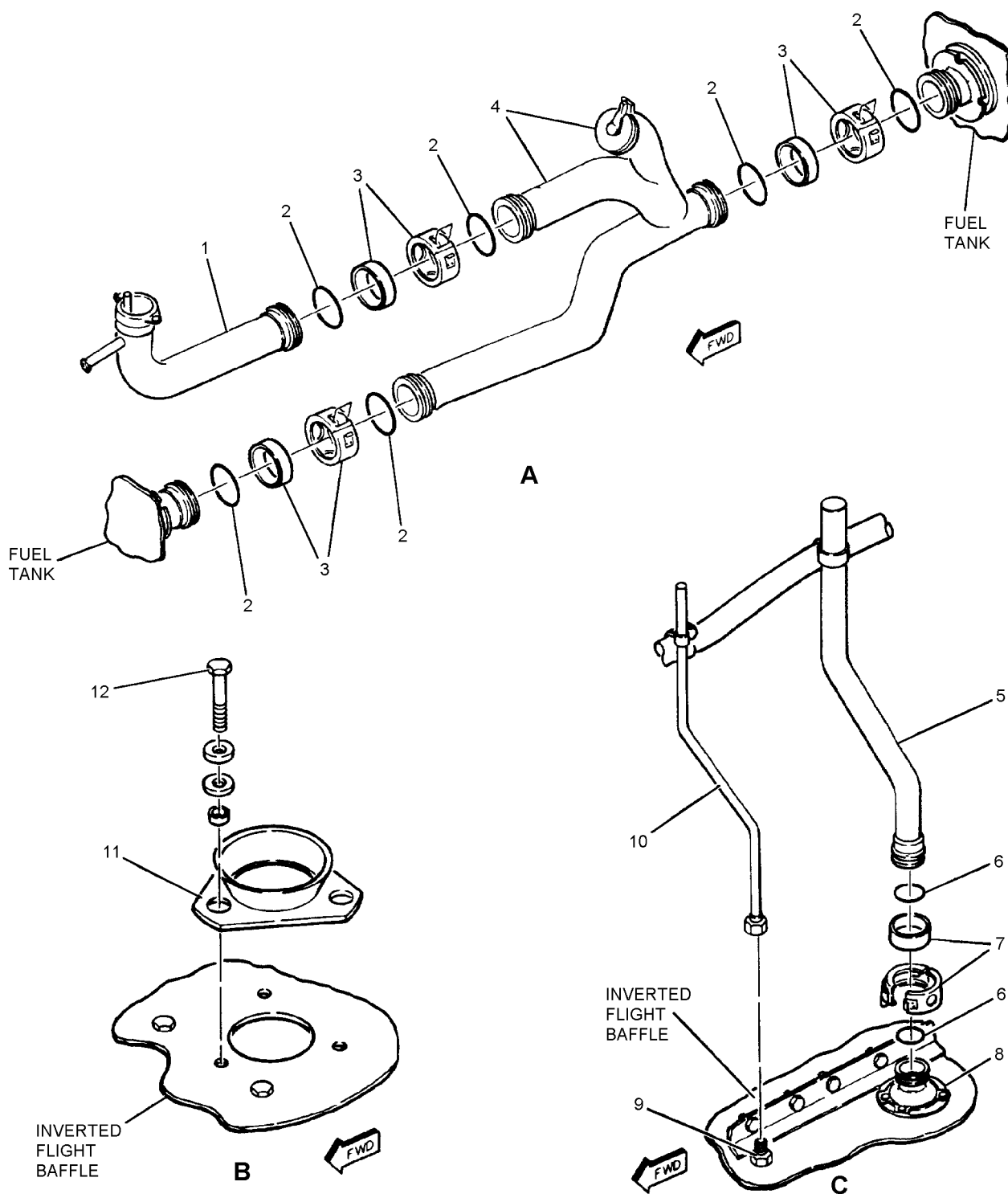


Figure 1. No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608) (Sheet 2)

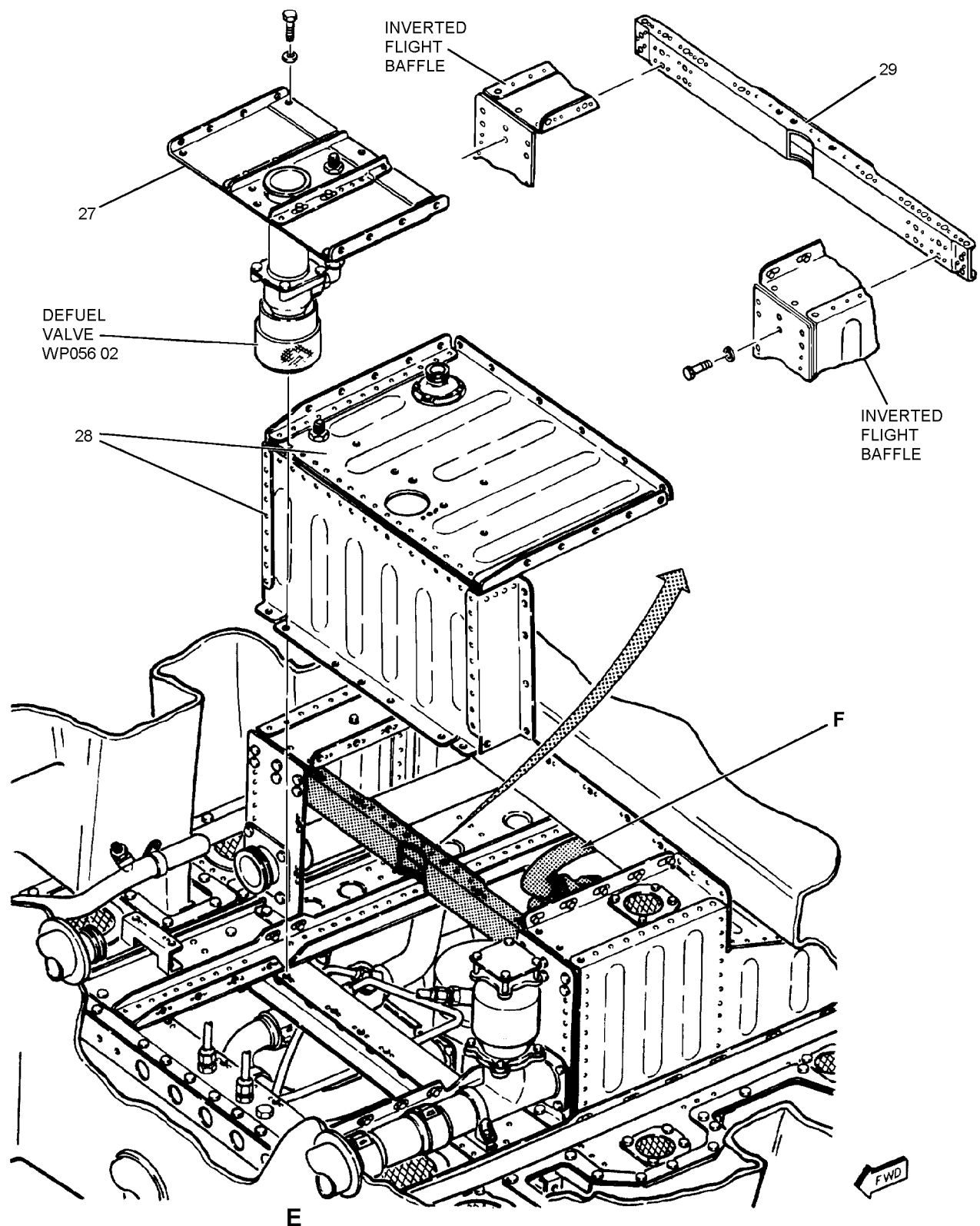


Figure 1. No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608) (Sheet 4)

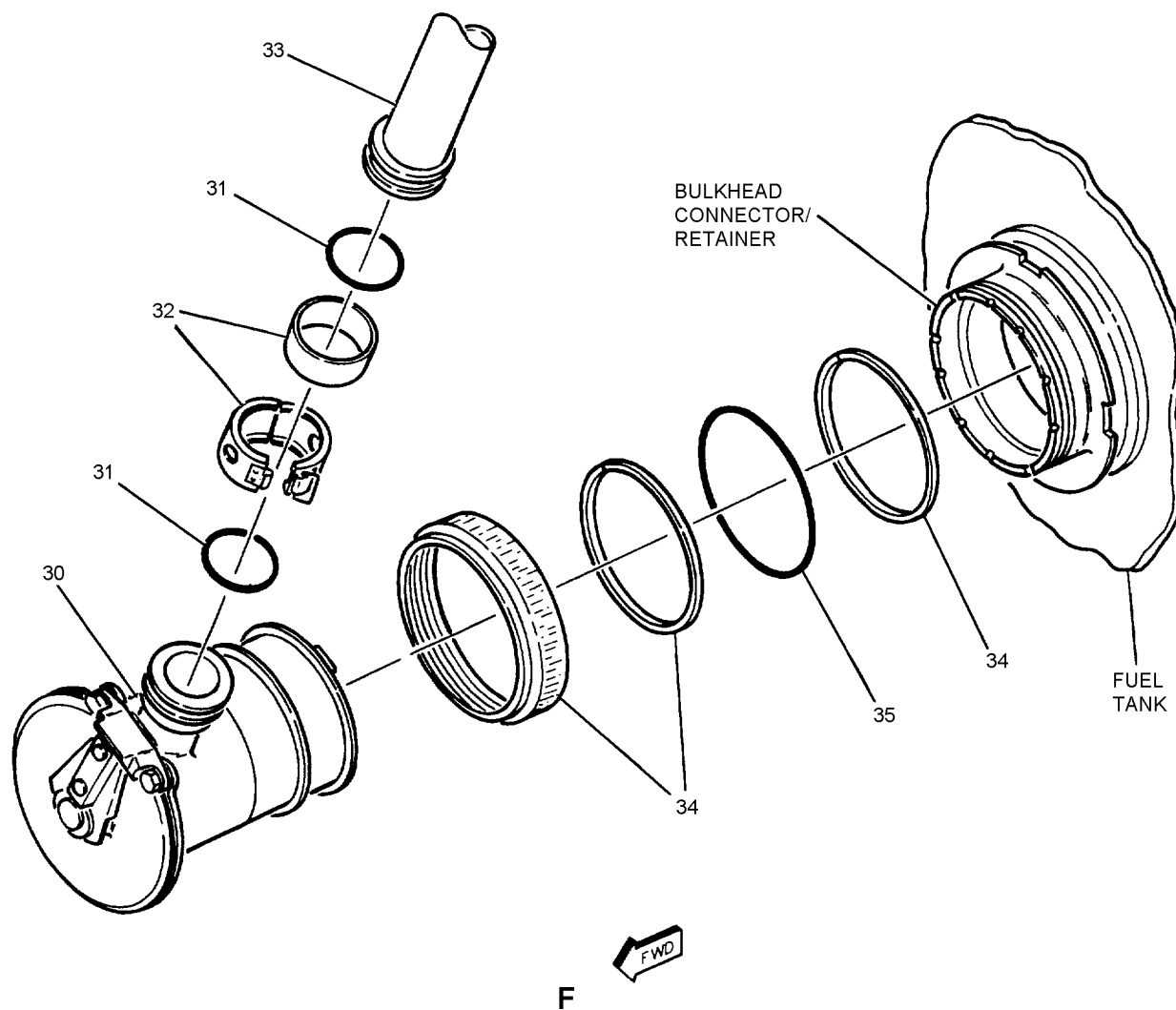


Figure 1. No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		NO. 3 FUEL TANK GRAVITY FEED CHECK VALVE ... (5VAP608)									
1	74A586381-1001	.	TUBE ASSY - CLIMB VENT, FUEL TANK NO. 3 ... (76301)						1		XBOOO
	NS103597-02	.	NUT, SELF-LOCKING, PLATE (80539) (MCDONNELL SPEC ST3M470C3M) (USE WITH INDEX 1)						2	*	PAOZZ
	F10965-1-3	.	NUT, SELF-LOCKING, PLATE (72962) (MCDONNELL SPEC ST3M470C3M) (USE WITH INDEX 1)						2	*	PAOZZ
	F29339-01-3	.	NUT, SELF-LOCKING, PLATE (15653) (MCDONNELL SPEC ST3M470C3M) (USE WITH INDEX 1)						2	*	PAOZZ
	MS20426AD3 #	.	RIVET (AP)						2		-
2	MS29513-230	.	PACKING						6		PAOZZ
3	W901K40DE	.	COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-40D) (INCLUDES SLEEVE)						3		PAOZZ
	14J12-40A	.	COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-40D) (INCLUDES SLEEVE)						3		PAOZZ
	W901F40DE	.	COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-40D) (INCLUDES SLEEVE)						3	*	PAOZZ
4	74A585003-2001	.	MAIN VENT ASSEMBLY (NO. 3 FUEL TANK DIVE VENT CHECK VALVE) (76301) (5VAP582)						1		PAOZZ
	NAS1802-06-7	.	SCREW (USE WITH INDEX 4)						2		PAOZZ
	AN960JD6L	.	WASHER (USE WITH INDEX 4)						2		PAOZZ
	NAS1291C06M	.	NUT (USE WITH INDEX 4)						2		PAOZZ
5	74A586314-1005	.	TUBE ASSEMBLY, METAL - VENT, AFT, INVERTED FLT COMPT, TK 3 (76301)						1		XBOZZ
6	MS29513-214	.	PACKING						2		PAOZZ
7	W901K16DE	.	COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-16D) (INCLUDES SLEEVE)						1		PAOZZ
	14J12-16A	.	COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-16D) (INCLUDES SLEEVE)						1		PAOZZ
	W901F16DE	.	COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-16D) (INCLUDES SLEEVE)						1	*	PAOZZ
8	74A586248-2007	.	CONNECTOR, FLANGE (FITTING) (76301)						1		XBOZZ
9	7M637BT-6D	.	NIPPLE, TUBE (76301)						1		PAOZZ
10	74A586313-1005	.	TUBE ASSEMBLY, METAL - VENT, FWD, INVERTED FLT COMPT TK 3 (76301)						1		MGOZZ
11	74A586297-2001	.	GUIDE PROBE - FUEL QTY, TANK 2 & 3 (76301)						1		XBOZZ
12	NAS673V4	.	BOLT						3		PAOZZ
	4M36-01016	.	WASHER (76301) (USE WITH INDEX 12)						6		PAOZZ
	NAS43DD3-8	.	SPACER (USE WITH INDEX 12)						3		PAOZZ
13	MS29513-226	.	PACKING						6		PAOZZ
14	W901K32DE	.	COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-32D) (INCLUDES SLEEVE)						2		PAOZZ

Figure 1. No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608) (Sheet 6)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
	14J12-32A	.						COUPLING, CLAMP, GROOVED (24984)	2		PAOZZ
								(MCDONNELL SPEC 7M765-32D)			
								(INCLUDES SLEEVE)			
	W901F32DE	.						COUPLING, CLAMP, GROOVED (79326)	2	*	PAOZZ
								(MCDONNELL SPEC 7M550-32D)			
								(INCLUDES SLEEVE)			
15	74A586216-1005	.						TUBE ASSEMBLY, METAL - REFUEL TANK	1		XBOZZ
								NO. 2 (76301)			
16	74A586317-1005	.						MANIFOLD, FUEL, AIRCRAFT - FUEL TANK	1		XBOZZ
								NO. 3 (76301) (SUPERSEDES 74A586317-1001)			
	NAS673V2	.						BOLT (AP)	4		PAOZZ
	AN960JD10L	.						WASHER (AP)	4		PAOZZ
17	NAS1787A32G	.						CLAMP	1		PAOZZ
	NAS673V9	.						BOLT (AP)	2		PAOZZ
	AN960JD10L	.						WASHER (AP)	2		PAOZZ
18	7M148V6	.						ELBOW TUBE (76301)	1		XBOZZ
19	74A586341-1015	.						TUBE ASSEMBLY, METAL - PILOT VALVE RH	1		MGOZZ
								PORT TO REFUEL V (76301) (SUPERSEDES			
								74A586341-1007 AND 74A586341-1011)			
20	W904K32DE	.						COUPLING, CLAMP, GROOVED (HALF)	1		PAOZZ
								(79326) (MCDONNELL SPEC 7M765-32D1)			
	14C12-32A	.						COUPLING, CLAMP, GROOVED (HALF)	1		PAOZZ
								(24984) (MCDONNELL SPEC 7M765-32D1)			
	W904F32DE	.						COUPLING, CLAMP, GROOVED (HALF)	1	*	PAOZZ
								(79326) (MCDONNELL SPEC 7M550-32D1)			
21	74A586248-2001	.						CONNECTOR, FLANGE (FITTING) (76301)	1		XBOZZ
	NAS674V3	.						BOLT (AP)	4		PAOZZ
	AN960JD416L	.						WASHER (AP)	4		PAOZZ
22	7M637BT-6D	.						NIPPLE, (76301)	1	A	PAOZZ
	7M637BY-6D	.						ELBOW, (76301)	1	B	PAOZZ
23	7M637BD-6D	.						NIPPLE (763013)	1		PAOZZ
	MS29512-06	.						PACKING (USE WITH INDEX 23)	1		PAOZZ
24	74A586669-1017	.						TUBE ASSEMBLY, METAL - PRESS SENSOR	1		MGOZZ
								TO DEFUEL LINE, TK 3 (76301)			
								(SUPERSEDES 74A586669-1013)			
25	MS25281-R20	.						CLAMP	1		PAOZZ
	NAS673V3	.						BOLT (AP)	1		PAOZZ
	AN960JD10L	.						WASHER (AP)	1		PAOZZ
26	74A586323-1035	.						BRACKET ASSY (76301)	1		XBOZZ
	MS21060L3	.						NUT, PLATE (USE WITH INDEX 26)	1		PAOZZ
	NAS1079AD3 #	.						RIVET (AP)	2		-
27	74A586315-2013	.						PANEL ASSY, FRONT (76301) (FOR REPAIR	1		XBOOO
								SEE WP024 05)			
	NAS673V4	.						BOLT (AP)	AR		PAOZZ
	AN960JD0L	.						WASHER (AP)	AR		PAOZZ
28	74A586315-2011	.						PANEL ASSY, CENTER (76301) (FOR REPAIR	1		XBOOO
								SEE WP024 05)			
29	74A586323-1007	.						STIFFENER ASSY (76301) (FOR REPAIR SEE	1	C	XBOOO
								WP024 05)			
	74A586323-2017	.						SEE ABOVE	1	D	XBOOO
	NAS673V4	.						BOLT (AP)	12		PAOZZ
	AN960JD10L	.						WASHER (AP)	12		PAOZZ
30	74A585002-2005	.						FEED ASSEMBLY FUEL (NO. 3 FUEL TANK	1		PAOZZ
								GRAVITY FEED CHECK VALVE) (76301)			
								(5VAP608)			

Figure 1. No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608) (Sheet 7)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
31	MS29513-214	.						PACKING	2		PAOZZ
32	W901K16DE	.						COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-16D) (INCLUDES SLEEVE)	1		PAOZZ
	14J12-16A	.						COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-16D) (INCLUDES SLEEVE)	1		PAOZZ
	W901F16DE	.						COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-16D) (INCLUDES SLEEVE)	1	*	PAOZZ
33	74A586314-1007	.						TUBE ASSEMBLY, METAL - VENT, AFT, INVERTED FLT COMPT, TK 3 (76301)	1		XBOZZ
34	W702-40D	.						NUT ASSEMBLY, TUBE COUPLING (73926) (MCDONNELL SPEC STS191-40D) (INCLUDES NUT AND 2 WASHERS)	1		PAOZZ
35	MS29513-334	.						PACKING	1		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

CODE	USABLE ON	MODEL
A	161716 THRU 161720	F/A-18A/B
B	161721 & UP	F/A-18A, F/A-18B
C	161716 & UP	F/A-18A/B
D	161353 THRU 161715 AFTER F/A-18 AFC 18	F/A-18A/B

Figure 1. No. 3 Fuel Tank Gravity Feed Check Valve (5VAP608) (Sheet 8)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 4 FUEL TANK TRANSFER SHUTOFF VALVE AND PILOT VALVE (5VAP565 AND 5VAP519)

INTERNAL FUEL TRANSFER SYSTEM

Title	WP Number
No. 4 Fuel Tank Transfer Shutoff Valve and Pilot Valve - 161353 THRU 161761 BEFORE F/A-18 AFC 53	116 01
No. 4 Fuel Tank Transfer Shutoff Valve and Pilot Valve - 161924 AND UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 53	116 02

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****NO. 4 FUEL TANK TRANSFER SHUTOFF VALVE AND PILOT VALVE (5VAP565 AND 5VAP519)****INTERNAL FUEL TRANSFER SYSTEM****EFFECTIVITY: 161353 THRU 161761 BEFORE F/A-18 AFC 53****Reference Material**

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Aft Access Cover and Tank Entry Procedure	WP008 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-200
No. 4 Fuel Tank Transfer Test	WP012 06
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required (Cont)

Materials Required		Nomenclature		Specification or Part Number
Nomenclature	Specification or Part Number			
Packing (2)	MS29512-06	Packing (4)		MS29513-218
		Packing		MS29513-222
		Petrolatum, Technical		VV-P-236 (CAGE 81348)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Do no. 4 fuel tank aft access cover and tank entry procedure removal (WP008 00).
- c. Remove couplings (3, detail A), tube (4), and packings (2).
- d. Disconnect elbow (8) at transfer precheck valve.
- e. Remove valve (5), packing (10), and attaching parts.
- f. Remove elbow (8), nut (7), and packing (6) from valve (5).
- g. Disconnect tube (9) from nipple (14).
- h. Remove valve (12) and attaching parts.
- i. Remove nipple (14) and packing (6) from valve (12).

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

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- b. Lubricate new packings with petrolatum.



To prevent valve malfunction, shoulder of elbow (8) must protrude a minimum of 0.560 inch from valve boss.

- c. Install nut (7, detail A, figure 1) and packing (6) and install elbow (8) in valve (5), making sure shoulder of elbow (8) protrudes a minimum of 0.560 inch from valve boss (detail B).
- d. Prepare mating surfaces of valve (5, detail A), and elbow (11) for electrical bond (A1-F18AC-LMM-000).
- e. Install packing (10), valve (5), and attaching parts. Connect elbow (8) at transfer precheck valve.
- f. Install packings (2), couplings (3), and tube (4).
- g. Install packing (6) and nipple (14) on valve (12).
- h. Prepare mating surfaces of valve (12) and support (13) for electrical bond (A1-F18AC-LMM-000).
- i. Install valve (12) and attaching parts.
- j. Connect valve (12) and tube (9).
- k. Do no. 4 fuel tank aft access cover and tank entry procedure installation (WP008 00).
- l. Connect utility and emergency battery connectors (WP013 00).
- m. Do no. 4 fuel tank transfer test (A1-F18AC-460-200, WP012 06).

3. ILLUSTRATED PARTS BREAKDOWN.

- 4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

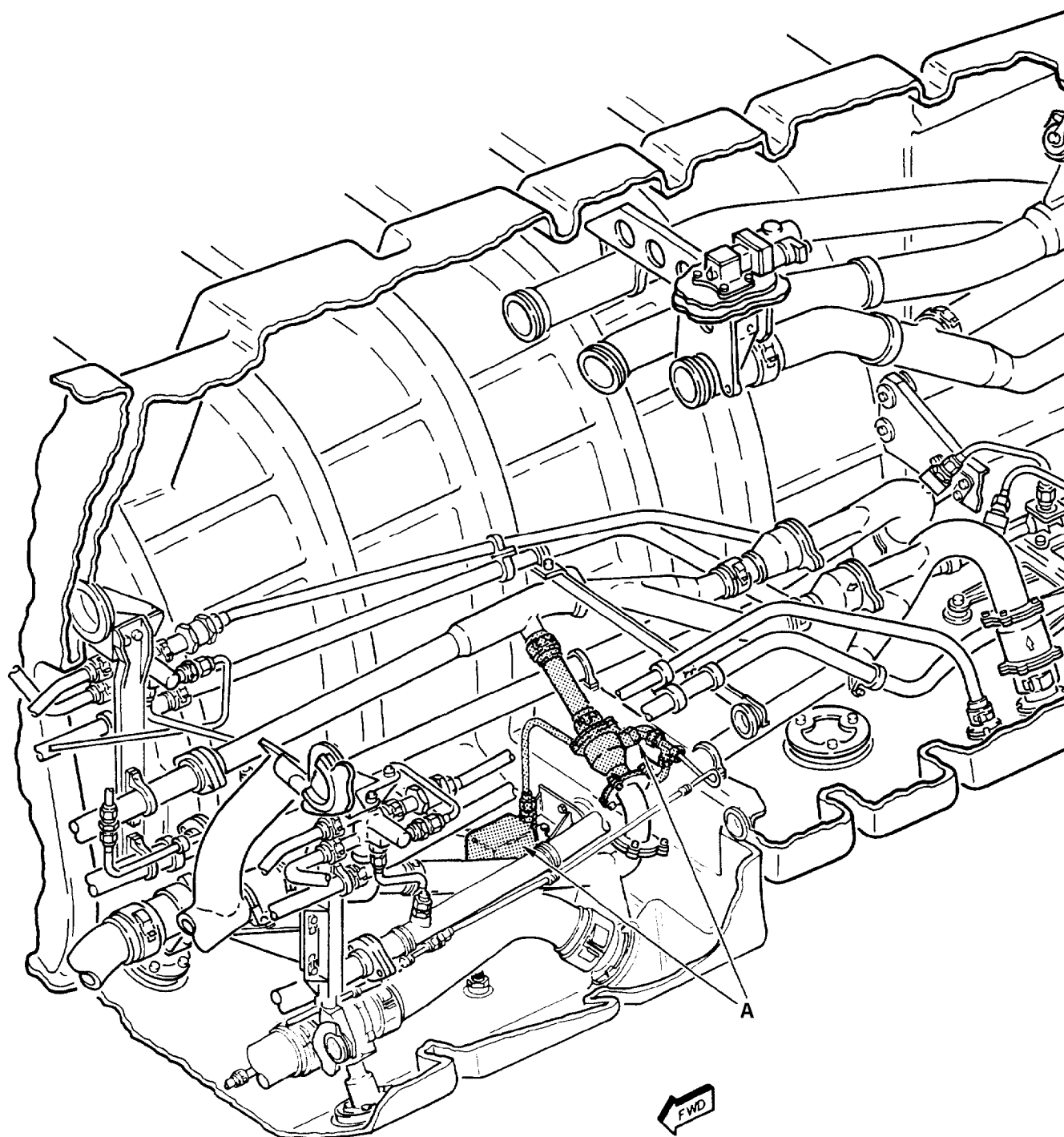


Figure 1. No. 4 Fuel Tank Transfer Shutoff Valve (5VAP565) and Pilot Valve (5VAP519) (Sheet 1)

1160101A

LEGEND

1 DIMENSION IS USED FOR 2770042-107
AND 2770042-109 VALVE ONLY.

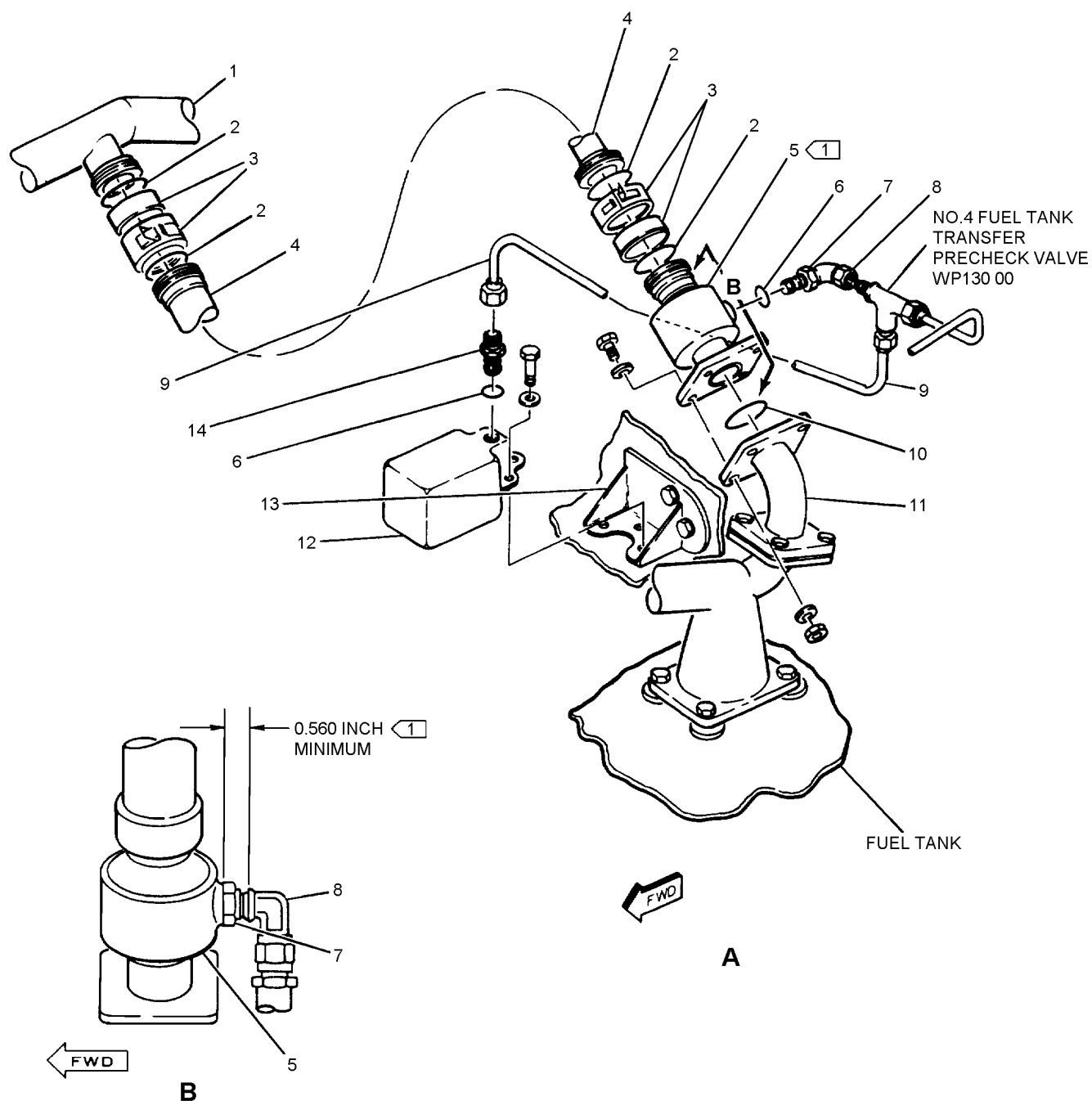


Figure 1. No. 4 Fuel Tank Transfer Shutoff Valve (5VAP565) and Pilot Valve (5VAP519) (Sheet 2)

1160101B

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 4 FUEL TANK TRANSFER SHUTOFF VALVE			
		(5VAP565) AND PILOT VALVE (5VAP519)			
1	74A586492-1013	. MANIFOLD, FLUID, AIRCRAFT - MOTIVE	1		PAOZZ
		FLOW BOOST XFR, FUEL (76301)			
		(SUPERSEDES 74A586492-1009)			
2	MS29513-218	. PACKING	4		PAOZZ
3	W901K20DE	. COUPLING, CLAMP, GROOVED (79326)	2	*	PAOZZ
		(MCDONNELL SPEC 7M765-20D)			
		(INCLUDES SLEEVE)			
	14J12-20A	. COUPLING, CLAMP, GROOVED (24984)	2	*	PAOZZ
		(MCDONNELL SPEC 7M765-20D)			
		(INCLUDES SLEEVE)			
4	74A586487-1007	. TUBE ASSEMBLY, METAL - MF TRANSFER,	1		XBOZZ
		TANK 4 (76301) (SUPERSEDES			
		74A586487-1003)			
5	2770042-113	. VALVE, SHUTOFF - FUEL TRANSFER	1		PAOZZ
		(TANK 4) (NO. 4 FUEL TANK TRANSFER			
		SHUTOFF VALVE) (92003) (MCDONNELL			
		SPEC 74-580164-213) (5VAP565)			
	2770042-111	. VALVE, SHUTOFF - FUEL TRANSFER	1	*	PAOZZ
		(TANK 4) (NO. 4 FUEL TANK TRANSFER			
		SHUTOFF VALVE) (92003) (MCDONNELL			
		SPEC 74-580164-211) (5VAP565)			
	2770042-109	. VALVE, SHUTOFF - FUEL TRANSFER	1	*	PAOZZ
		(TANK 4) (NO. 4 FUEL TANK TRANSFER			
		SHUTOFF VALVE) (92003) (MCDONNELL			
		SPEC 74-580164-209) (5VAP565)			
	2770042-107	. VALVE, SHUTOFF - FUEL TRANSFER	1	*	PAOZZ
		(TANK 4) (NO. 4 FUEL TANK TRANSFER			
		SHUTOFF VALVE) (92003) (MCDONNELL			
		SPEC 74-580164-201) (5VAP565)			
	NAS674V6	. BOLT (AP)	4		PAOZZ
	AN960JD416L	. WASHER (AP)	8		PAOZZ
	NAS1291C4M	. NUT (AP)	4		PAOZZ
6	MS29512-06	. PACKING	2		PAOZZ
7	AN924-6D	. NUT	1		PAOZZ
8	ST7M263V6	. ELBOW (76301)	1		PAOZZ
	ST7M263DA6	. ELBOW (76301)	1	*	PAOZZ
9	74A586856-1003	. TUBE ASSEMBLY, METAL - FUEL LEVEL	1		MGOZZ
		SENSOR, TANK NO. 4 (76301)			
10	MS29513-222	. PACKING	1		PAOZZ
11	74A586405-1007	. ELBOW, FLANGE - FUEL TRANSFER PUMP	1		PAOZZ
		(76301)			
	74A586405-1003	. ELBOW, FLANGE - FUEL TRANSFER PUMP	1	*	PAOZZ
		(76301)			
	74A586405-1001	. SEE ABOVE	1	*	PAOZZ
	NA5674V4	. BOLT (AP)	4		PAOZZ
	AN960JD416L	. WASHER (AP)	4		PAOZZ
12	2760110-102	. VALVE, FLOAT, AIRCRAFT - FUEL TRANSFER	1		PAOZZ
		(TANK 4) (NO. 4 FUEL TANK PILOT VALVE)			
		(92003) (MCDONNELL SPEC 74-580164-203)			
		(5VAP519)			

Figure 1. No. 4 Fuel Tank Transfer Shutoff Valve (5VAP565) and Pilot Valve (5VAP519) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
	2760110-101	. VALVE, FLOAT, AIRCRAFT - FUEL TRANSFER . . . (TANK 4) (NO. 4 FUEL TANK PILOT VALVE) (92003) (MCDONNELL SPEC 74-580164-203) (5VAP519)	1	*	PAOZZ
	NAS674V3	. BOLT (AP)	3		PAOZZ
	AN960JD416L	. WASHER (AP)	3		PAOZZ
13	74A586443-1001	. SUPPORT, FUEL LEVEL SENSOR, ENGINE FUEL SYS (76301)	1		XBOGG
14	7M637BT-6D	. NIPPLE, TUBE (76301)	1		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS. (WP002 00)

Figure 1. No. 4 Fuel Tank Transfer Shutoff Valve (5VAP565) and Pilot Valve (5VAP519) (Sheet 4)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****NO. 4 FUEL TANK TRANSFER SHUTOFF VALVE AND PILOT VALVE
(5VAP565 AND 5VAP519)****INTERNAL FUEL TRANSFER SYSTEM****EFFECTIVITY: 161924 AND UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 53**

Reference Material

Fuel System A1-F18AC-460-300
 No. 4 Fuel Tank Aft Access Cover and Tank Entry Procedure WP008 00
 Fuel Tank Maintenance Precautions and General Preparation WP013 00
Fuel System A1-F18AC-460-200
 No. 4 Fuel Tank Transfer Test WP012 06
Line Maintenance Procedures A1-F18AC-LMM-000

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	4 Mar 83	-
F/A-18 AFC 53	-	Elimination of Tanks 1 and 4 Sneak Circuit, Tank 4 Motive Flow Shut Off Valve, and Raised Inverted Baffle (ECP-MDA-F/A-18-00055/C1)	15 Jul 86	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (2)	MS29512-06
Packing (4)	MS29513-218
Packing	MS29513-222
Petrolatum, Technical	VV-P-236 (CAGE 8148)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Do no. 4 fuel tank aft access cover and tank entry procedure removal (WP008 00).
- c. Disconnect clamps (17 and 18, figure 1, detail A) and remove attaching parts.
- d. Remove couplings (3), tube (4), and packings (2).
- e. On 161924 THRU 161965 BEFORE F/A-18 AFC 53, disconnect elbow (7, detail B) at transfer precheck valve.
- f. On 161966 AND UP; ALSO 161353 THRU 161965 AFTER F/A-18 AFC 53, disconnect elbow (7) from nipple (6).
- g. Remove elbow (7), nut (8), and packing (9) from valve (10).
- h. Remove valve (10), packing (11), and attaching parts.
- i. On 161924 THRU 161965 BEFORE F/A-18 AFC 53, disconnect tube (21) from nipple (20).
- j. Disconnect valves (14 and 19) from bracket (13) by removing attaching parts.
- k. Move pilot valve (14) and control valve (19) away from bracket (13).

- l. Hold nipple (15), rotate pilot valve (14) off of control valve (19).

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



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- b. Lubricate new packings with petrolatum.

NOTE

To prevent valve 2770042-107 or 2770042-109 malfunction, shoulder of elbow must protrude a minimum of 0.560 inch from valve boss.

- c. Install nut (8, detail A, figure 1), packing (9), and install elbow (7) in valve (10). On 2770042-107 or 2770042-109 valve, make sure shoulder of elbow (7) protrudes a minimum of 0.560 inch from valve boss (detail B).
- d. Prepare mating surfaces of valve (10) and elbow (12) for electrical bond (A1-F18AC-LMM-000).
- e. Install packing (11), valve (10), and attaching parts.
- f. On 161924 THRU 161965 BEFORE F/A-18 AFC 53, connect elbow (7) to transfer precheck valve.
- g. On 161966 AND UP; ALSO 161353 THRU 161965 AFTER F/A-18 AFC 53, connect elbow (7) to nipple (6).
- h. Install packings (2), couplings (3), and tube (4).
- i. Prepare mating surfaces of valves (14 and 19) and bracket (13) for electrical bond (A1-F18AC-LMM-000).
- j. Install packing (9) and rotate pilot valve (14) on to nipple (15).
- k. Position pilot valve (14) with control valve (19) on bracket (13) and install attaching parts.
- l. On 161924 THRU 161965 BEFORE F/A-18 AFC 53, connect tube (21).

m. Connect clamps (17 and 18) and install attaching parts.

n. Do no. 4 fuel tank aft access cover and tank entry procedure installation (WP008 00).

o. Connect utility and emergency battery connectors (WP013 00).

p. Do no. 4 fuel tank transfer test (A1-F18AC-460-200, WP012 06).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

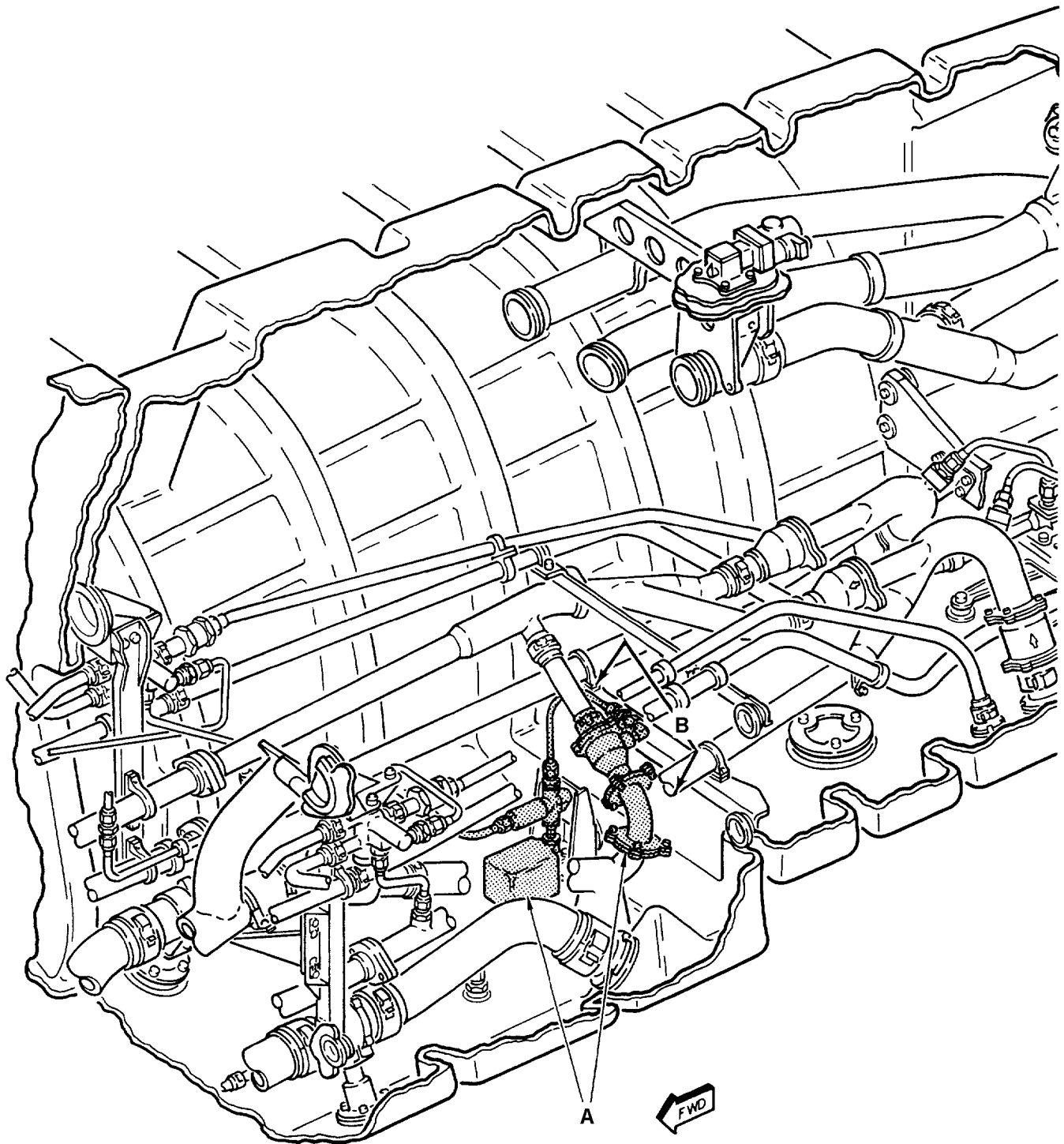


Figure 1. No. 4 Fuel Tank Transfer Shutoff Valve (5VAP565) and Pilot Valve (5VAP519) (Sheet 1)

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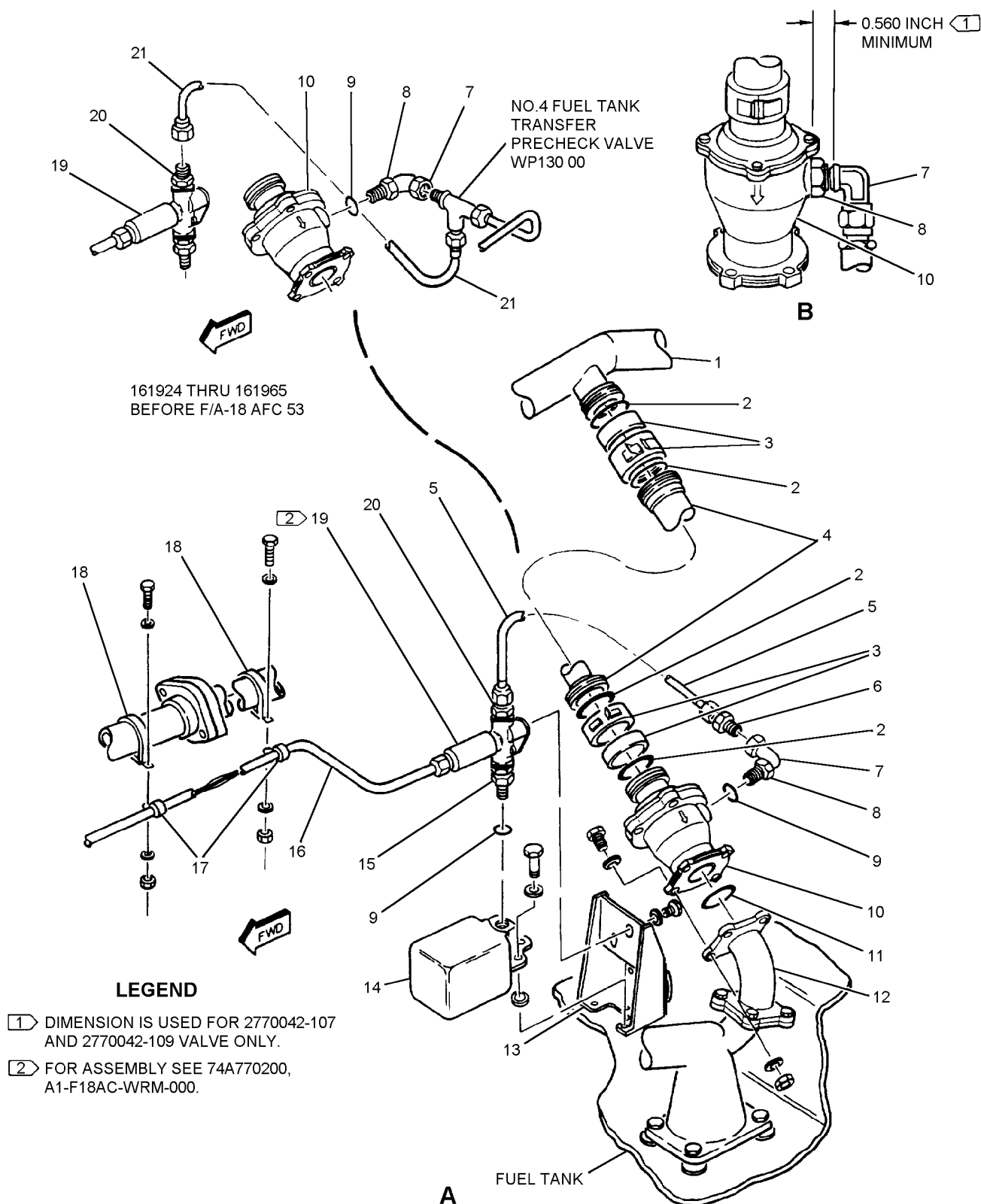


Figure 1. No. 4 Fuel Tank Transfer Shutoff Valve (5VAP565) and Pilot Valve (5VAP519) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 4 FUEL TANK TRANSFER SHUTOFF VALVE (5VAP565) AND PILOT VALVE (5VAP519)			
1	74A586492-1013	. MANIFOLD, FLUID, AIRCRAFT - MOTIVE FLOW BOOST XFR, FUEL (76301) (SUPERSEDES 74A586492-1009)	1		PAOZZ
2	MS29513-218	. PACKING	4		PAOZZ
3	W901K20DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-20D) (INCLUDES SLEEVE)	2	*	PAOZZ
	14J12-20A	. SEE ABOVE (24984)	2	*	PAOZZ
4	74A586487-1007	. TUBE ASSEMBLY, METAL MF TRANSFER, TANK NO. 4 (76301)	1		XBOZZ
5	74A586508-1011	. TUBE ASSEMBLY, METAL - FUEL LEVEL SENSOR, TANK NO. 4 (76301) (SUPERSEDES 74A586508-1005)	1	A	MGOZZ
6	7M637BD-6D	. NIPPLE, TUBE (76301)	1	A	PAOZZ
7	ST7M263V6	. ELBOW, TUBE (76301)	1		PAOZZ
8	AN924-6D	. NUT	1		PAOZZ
9	MS29512-06	. PACKING	2		PAOZZ
10	2770042-113	. VALVE, SHUTOFF - FUEL TRANSFER (TANK 4) (NO. 4 FUEL TANK TRANSFER SHUTOFF VALVE) (92003) (MCDONNELL SPEC 74-580164-213) (5VAP565)	1		PAOZZ
	2770042-111	. VALVE, SHUTOFF - FUEL TRANSFER (TANK 4) (NO. 4 FUEL TANK TRANSFER SHUTOFF VALVE) (92003) (MCDONNELL SPEC 74-580164-211) (5VAP565)	1	*	PAOZZ
	2770042-109	. SEE ABOVE (MCDONNELL SPEC 74-580164-209)	1	*	PAOZZ
	2770042-107	. SEE ABOVE (MCDONNELL SPEC 74-580164-201)	1	*	PAOZZ
	NAS674V6	. BOLT (AP)	4		PAOZZ
	AN960JD416L	. WASHER (AP)	8		PAOZZ
	NAS1291C4M	. NUT (AP)	4		PAOZZ
11	MS29513-222	. PACKING	1		PAOZZ
12	74A586405-1007	. ELBOW, FLANGE - FUEL TRANSFER PUMP (76301)	1		PAOZZ
	74A586405-1003	. ELBOW, FLANGE - FUEL TRANSFER PUMP (76301)	1	*	PAOZZ
	74A586405-1001	. SEE ABOVE	1	*	PAOZZ
	NAS674V4	. BOLT (AP)	4		PAOZZ
	AN960JD416L	. WASHER (AP)	4		PAOZZ
13	74A586392-1001	. BRACKET ASSEMBLY - SOLENOID OPERATED PILOT VALVE, TANK 4 (76301) (SUPERSEDES 74A586305-1001)	1		XBOOO
	NAS673V1	. BOLT (AP)	2		PAOZZ
	AN960JD10	. WASHER (AP)	2		PAOZZ
	MS21209F4-15L	. INSERT (USE WITH INDEX 13)	3		PAOZZ
14	2760110-102	. VALVE, FLOAT, AIRCRAFT - FUEL TRANSFER . . . (TANK 4) (NO. 4 FUEL TANK PILOT VALVE) (92003) (MCDONNELL SPEC 74-580164-203) (5VAP519)	1		PAOZZ

Figure 1. No. 4 Fuel Tank Transfer Shutoff Valve (5VAP565) and Pilot Valve (5VAP519) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
	NAS674V3	.	BOLT (AP)	.....					3		PAOZZ
	AN960JD416L	.	WASHER (AP) (UNDER BOLT)	.....					3		PAOZZ
	AN960JD416	.	WASHER (AP) (BETWEEN VALVE FLANGE	.....					3		PAOZZ
			AND BRACKET)								
15	7M637BT-6D	.	NIPPLE, TUBE (76301)	.....					1		PAOZZ
16	74A586507-1011	.	TUBE ASSEMBLY, METAL - SHUTOFF	.....					1		MGOZZ
			SOLENOID, TANK 4 (76301) (SUPERSEDES								
			74A586507-1001 AND 74A586507-1003)								
17	MS25281-R6	.	CLAMP (SUPERSEDES MS24281-6)	.....					2		PAOZZ
	NAS673V5	.	BOLT (AP)	.....					1		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					1		PAOZZ
	NAS1291C3M	.	NUT (AP)	.....					1		PAOZZ
18	MS25281-R24	.	CLAMP (SUPERSEDES MS25281-24)	.....					2		PAOZZ
19	517500-101	.	VALVE, SOLENOID SHUTOFF TANK 4	.....					1		PAOZZ
			(NO. 4 FUEL TANK TRANSFER CONTROL								
			VALVE) (96124) (MCDONNELL SPEC								
			74-580070-101) (5L-R167) (FOR ASSEMBLY								
			SEE 74A770200, A1-F18AC-WRM-000,								
			WP702 00)								
	NAS673V3	.	BOLT (AP)	.....					2		PAOZZ
	AN960JD416L	.	WASHER (AP)	.....					2		PAOZZ
20	7M637BD-6D	.	NIPPLE, TUBE (76301)	.....					1		PAOZZ
21	74A586508-1003	.	TUBE ASSEMBLY, METAL - FUEL LEVEL	.....					1	B	MGOZZ
			SENSOR, TANK NO. 4 (76301)								

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	188720 & UP: ALSO 161353 THRU 161965 AFTER F/A-18 AFC 53	F/A-18A/B
B	161924 THRU 161965 BEFORE F/A-18 AFC 53	F/A-18A/B

Figure 1. No. 4 Fuel Tank Transfer Shutoff Valve (5VAP565) and Pilot Valve (5VAP519) (Sheet 4)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
NO. 4 FUEL TANK TRANSFER CONTROL VALVE (5L-R167)
INTERNAL FUEL TRANSFER SYSTEM
EFFECTIVITY: 161924 AND UP; ALSO 161353 THRU
161761 AFTER F/A-18 AFC 53

Reference Material

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Aft Access Cover and Tank Entry Procedure	WP008 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-200
CG Control System Test	WP035 00
Line Maintenance Procedures	A1-F18AC-LMM-000
Wiring Repair with Parts Data General Wiring Repair Procedures	A1-F18AC-WRM-000

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 83	-
F/A-18 AFC 53	-	Elimination of Tanks 1 and 4 Sneak Circuit, Tank 4 Motive Flow Shut Off Valve, and Raised Inverted Baffle (ECP MDA-F/A-18-00055/C1)	15 Jul 86	-

Support Equipment Required

Nomenclature	Part Number or Type Designation
---------------------	--

Torque Wrench 0 to 200 Inch-Pounds	-
--	---

Materials Required

Nomenclature	Specification or Part Number
---------------------	---

Packing (3)	MS29512-06
Packing	MS29513-132
Petrolatum, Technical	VV-P-236 (CAGE 81348)
Tape, Lacing	MIL-T-43435 Type 2, Size 3 Finish C (CAGE 81349)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. On 163146 AND UP, remove bolt (2, figure 1) with washer and disconnect electrical lead (1).
- c. Disconnect connector (3, detail A).
- d. Remove ring (4), disconnect connector (5), and remove packing (6).
- e. Disconnect YEL/BLK wire from pin 3, YEL/WHT wire from pin 2 and YEL/RED wire from pin 4 of connector (5) (A1-F18AC-WRM-000).
- f. Attach 6 feet of lacing tape to disconnected wires.
- g. Do no. 4 fuel tank aft access cover and tank entry procedure removal (WP008 00).
- h. Disconnect clamps (11 and 21, detail B) and remove attaching parts.
- i. Disconnect tubes (14 and 22) from valve (12).

j. Remove valves (12 and 18) together by removing attaching parts from bracket (17).

k. Move pilot valve (18) and control valve (12) away from bracket (17). Rotate pilot valve (18) off of control valve (12) at nipple (19).



To prevent damage to wires, carefully pull valve wires through tubes.

l. At control valve (12), pull wires through tubes (7, Detail A and 22, Detail B), until lacing tape is visible.

m. Untie lacing tape from wires and secure string at both ends of tubes (7, Detail A and 22, Detail B).

n. Wrap wires around control valve (12) and remove valve.

o. Remove nipples (13 and 19), nut (20), packings (15), and retainer (16).

2. INSTALLATION.

a. Do general preparation for component installation (WP013 00).

b. Prepare mating surfaces of control valve (12, figure 1, detail B), pilot valve (18) and bracket (17) for electrical bond (A1-F18AC-LMM-000).



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c. Lubricate new packings with petrolatum before installation.

d. Install packings (15) on nipples (13 and 19) then install retainer (16), nipples, and nut (20) in control valve (12).

e. Rotate pilot valve (18) onto control valve (12) at nipple (19).

f. Position control valve (12) and pilot valve (18) on bracket (17) and install attaching parts.



To prevent damage to wires, use caution when wires are unwrapped from around valve and pulled through conduit tube.

g. Carefully unwrap wires from around control valve (12) and tie to end of lacing tape.

h. Carefully pull lacing tape at dorsal deck until wires are visible.

i. Connect tubes (14 and 22). Torque tube (22) to 80 inch-pounds. (QA)

j. Connect clamps (11 and 21) and install attaching parts.

k. At top of dorsal deck, untie lacing tape from around wires.

l. Connect wires, YEL/BLK wire to pin 3, YEL/WHT wire to pin 2 and YEL/RED wire to pin 4 of

5J-R120 connector (5, detail A) (A1-F18AC-WRM-000).

m. Install packing (6), position connector (5) in structure and install ring (4). Make sure jamnut is safetied with lockwire.

n. On 163146 AND UP, connect electrical lead (1) with bolt (2) and washer.

o. Connect connector (3) to connector (5).

p. Inspect work area inside tank for foreign objects. (QA)

q. Do no. 4 fuel tank aft access cover and tank entry procedure installation (WP008 00).

r. Do CG control system test (A1-F18AC-460-200, WP035 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

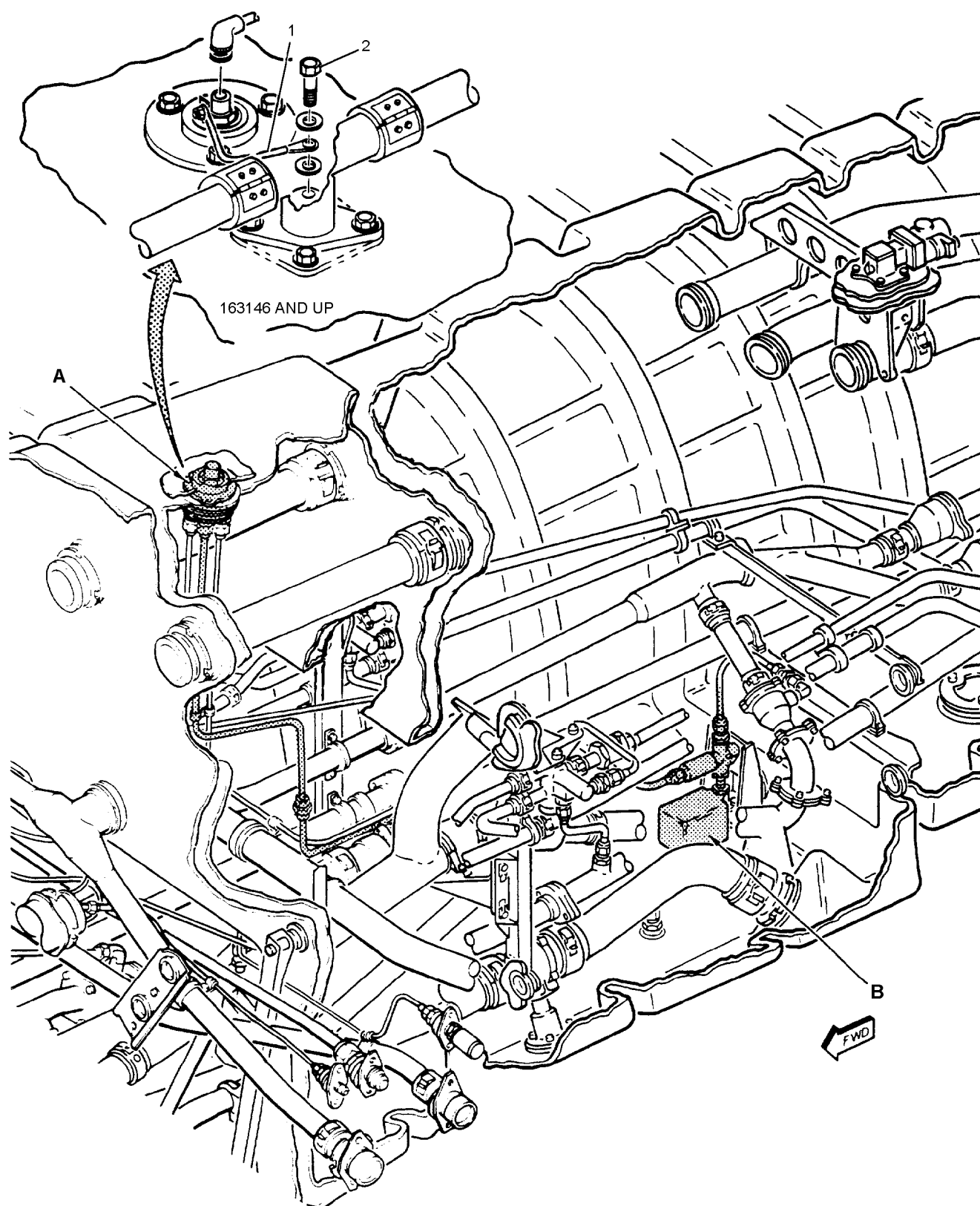


Figure 1. No. 4 Fuel Tank Transfer Control Valve (5L-R167) (Sheet 1)

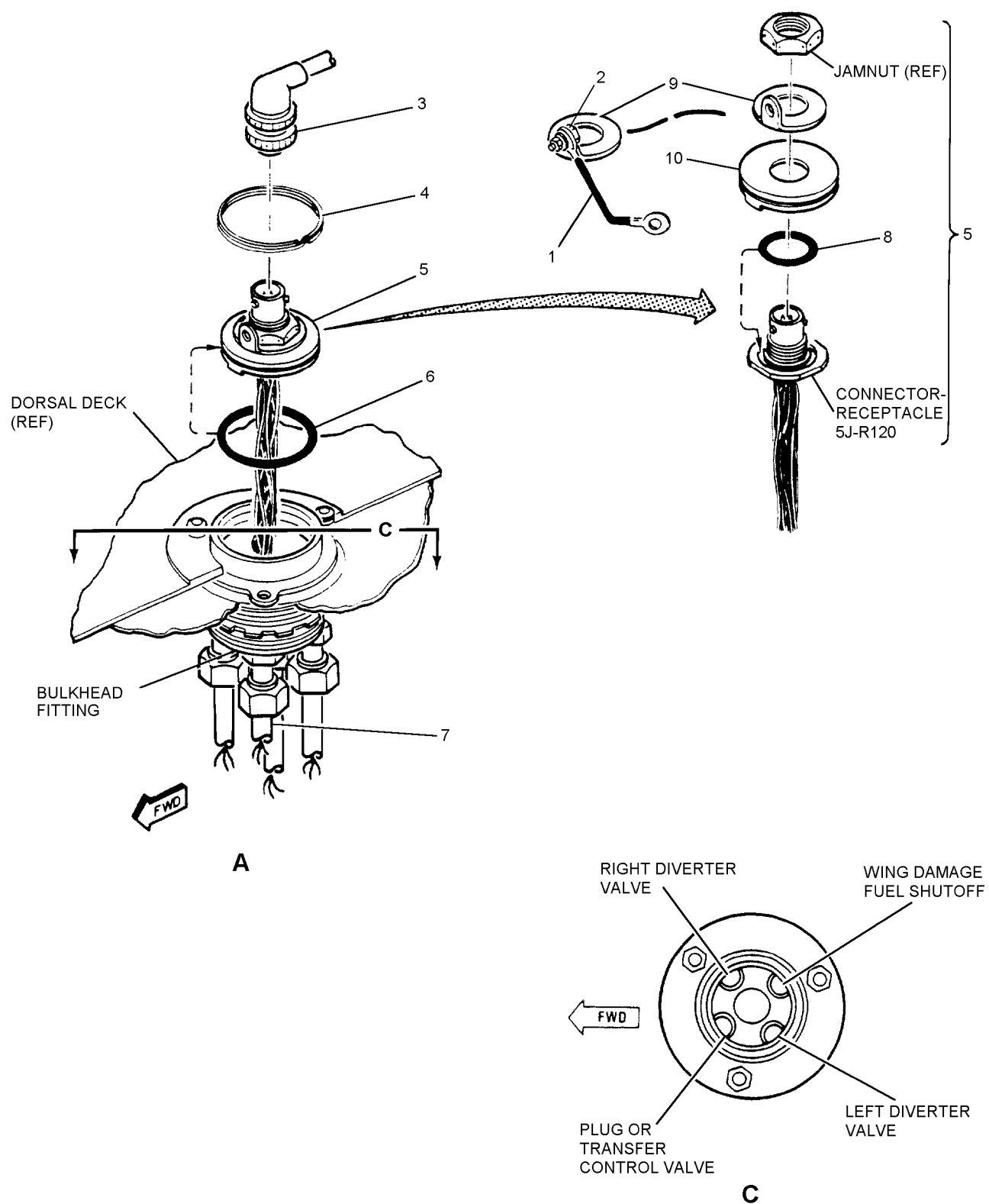
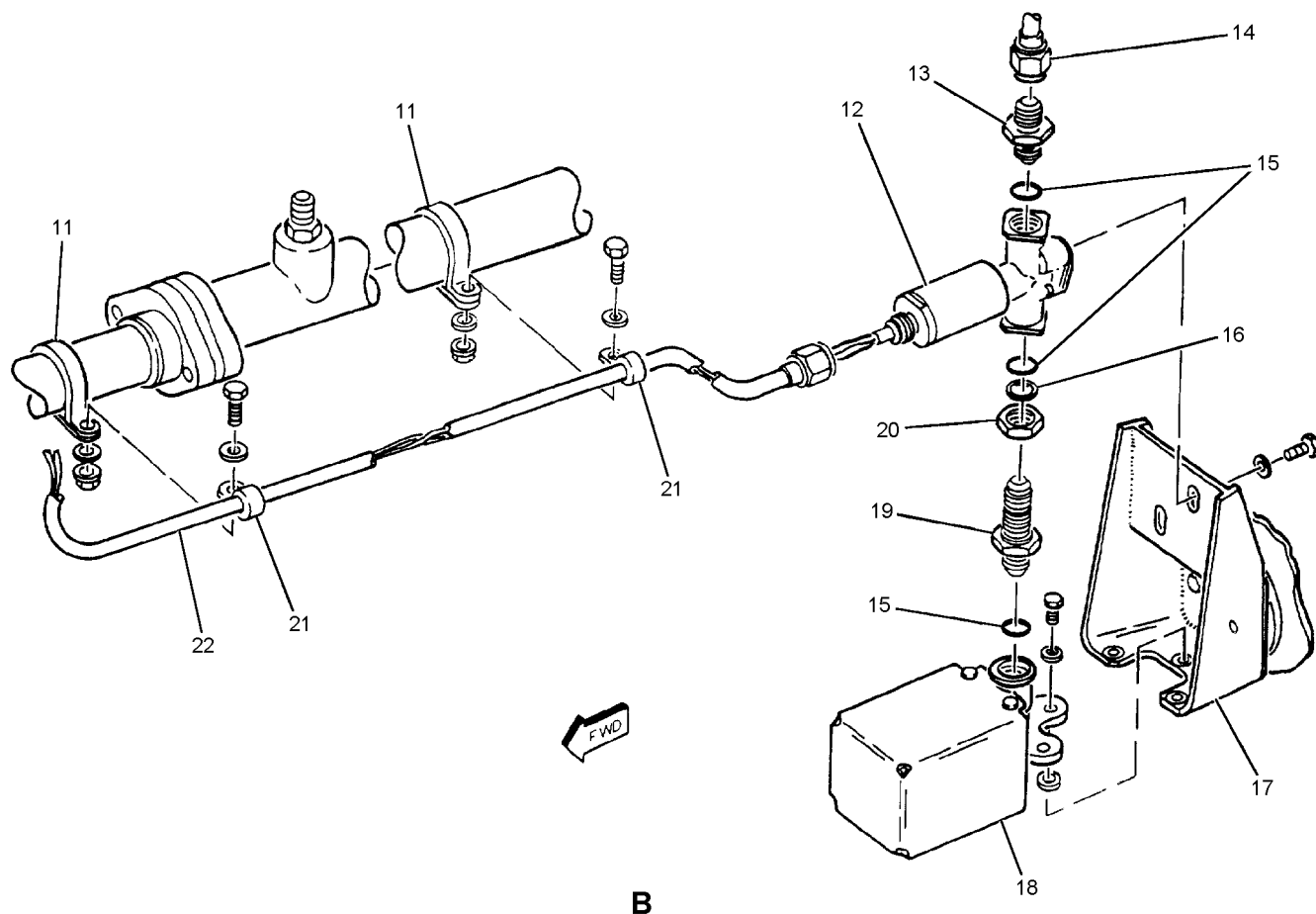
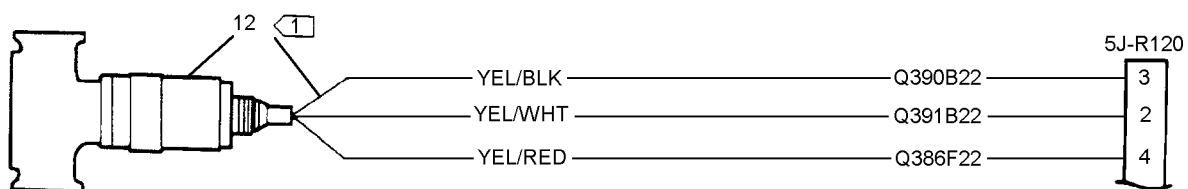


Figure 1. No. 4 Fuel Tank Transfer Control Valve (5L-R167) (Sheet 2)



B



LEGEND

1 FOR ASSEMBLY SEE 74A770200,
A1-F18AC-WRM-000, WP702 00

Figure 1. No. 4 Fuel Tank Transfer Control Valve (5L-R167) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 4 FUEL TANK TRANSFER CONTROL VALVE (5L-R167)			
1	MS25083-2BC5	. LEAD ELECTRICAL	1	C	PAOZZ
	NAS673V2	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
	NAS1291C3M	. NUT (AP)	1		PAOZZ
2	NAS674V5	. BOLT	1	C	PAOZZ
	AN960JD416L	. WASHER (UNDER BOLT) (USE WITH	1		PAOZZ
		INDEX 2)			
	AN960JD416	. WASHER (UNDER ELECTRICAL LEAD)	1		PAOZZ
		(USE WITH INDEX 2)			
3	MS27467T11B35S	. CONNECTOR, PLUG (5P-R120)	1		PAOZZ
4	RRT 200 SP M9	. RING, RETAINING (80756) (MCDONNELL	1		PAOZZ
		SPEC 9M188C200)			
5	KJL7YC103451-3	. CONNECTOR, RECEPTACLE, ELECTRICAL	1	*	PAOZZ
		(71468) (MCDONNELL SPEC 5M1701-11D35PN) (INCLUDES JAMNUT) (SJ-R120)			
	92344-01	. SEE ABOVE (14283)	1	*	PAOZZ
6	MS29513-132	. PACKING	1		PAOZZ
7	74A586506-1003	. TUBE ASSEMBLY, METAL - Y482, DORSAL	1		MGOZZ
		DECK, (76301) (SUPERSEDES 74A586506-1001)			
8	M25988/1-022	. PACKING (M25988-1-022) (NHPA	1		PAOZZ
		5M1701-11D35PN)			
9	74A586429-2355	. WASHER (76301) (SUPERSEDES	1		XBOZZ
		75A586429-2123)			
10	74A586454-2003	. HOLDER, ELECTRICAL CONNECTOR	1		PAOZZ
		FUEL SYSTEM (76301)			
11	MS25281-R24	. CLAMP (SUPERSEDES MS25281-24)	2		PAOZZ
12	517500-101	. VALVE, SOLENOID SHUTOFF TANK 4	1		PAOZZ
		(NO. 4 FUEL TANK TRANSFER CONTROL VALVE) (96124) (MCDONNELL SPEC 74-580070-101) (5L-R167) (FOR ASSEMBLY SEE 74A770200, A1-F18AC-WRM-000, WP702 00)			
	NAS674V3	. BOLT (AP)	2		PAOZZ
	AN960JD416L	. WASHER (AP)	2		PAOZZ
13	7M637BD-6D	. NIPPLE, TUBE (76301)	1		PAOZZ
14	74A586508-1003	. TUBE ASSEMBLY, METAL - FUEL LEVEL	1	A	MGOZZ
		SENSOR, TANK NO. 4 (76301)			
	74A586508-1011	. SEE ABOVE (SUPERSEDES 74A586508-1005)	1	B	MGOZZ
15	MS29512-06	. PACKING	3		PAOZZ
16	MS28773-06	. RETAINER	1		PAOZZ
17	74A586392-1001	. BRACKET ASSEMBLY - SOLENOID	1		XBOOO
		OPERATED PILOT VALVE, TANK 4 (76301) (SUPERSEDES 74A586305-1001)			
	NAS673V1	. BOLT (AP)	2		PAOZZ
	AN960JD10	. WASHER (AP)	2		PAOZZ
	MS21209F4-15L	. INSERT (USE WITH INDEX 17)	1		PAOZZ

Figure 1. No. 4 Fuel Tank Transfer Control Valve (5L-R167) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
18	2760110-102	. VALVE, FLOAT, AIRCRAFT - FUEL TRANSFER ... (TANK 4) (NO. 4 FUEL TANK PILOT VALVE) (92003) (MCDONNELL SPEC 74-580164-203) (5VAP519)	1		PAOZZ
	NAS674V3	. BOLT (AP)	3		PAOZZ
	AN960JD416L	. WASHER (AP) (UNDER BOLT)	3		PAOZZ
	AN960JD416	. WASHER (AP) (BETWEEN VALVE FLANGE AND BRACKET)	3		PAOZZ
19	7M637BT-6D	. NIPPLE, TUBE (76301)	1		PAOZZ
20	AN6289D6	. NUT	1		PAOZZ
21	MS25281-R6	. CLAMP (SUPERSEDES MS25281-6)	2		PAOZZ
	NAS673V5	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
	NAS1291C3M	. NUT (AP)	1		PAOZZ
22	74A586507-1011	. TUBE ASSY, METAL - SHUTOFF SOLENOID, TK 4 (76301) (SUPERSEDES 74A586507-1001 AND 74A586507-1003)	1		MGOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161924 THRU 161965	F/A-18A/B
B	161966 & UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 53	F/A-18A/B
C	163146 & UP	F/A-18A/B

Figure 1. No. 4 Fuel Tank Transfer Control Valve (5L-R167) (Sheet 5)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 4 FUEL TANK TRANSFER JET EJECTOR (5BAP567)

INTERNAL FUEL TRANSFER SYSTEM

Title	WP Number
No. 4 Fuel Tank Transfer Jet Ejector - 161353 THRU 161982 BEFORE	
F/A-18 IAFC 017 Part 1 and Part 2	WP117 01
No. 4 Fuel Tank Transfer Jet Ejector - 161983 AND UP, ALSO 161353	
THRU 161982 AFTER F/A-18 IAFC 017 Part 1 and Part 2	WP117 02

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****NO. 4 FUEL TANK TRANSFER JET EJECTOR (5BAP567)****INTERNAL FUEL TRANSFER SYSTEM****EFFECTIVITY: 161353 THRU 161982 BEFORE F/A-18 IAFC 017
PART 1 AND PART 2**

Reference Material

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Aft Access Cover and Tank Entry Procedure	WP008 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-200
No. 4 Fuel Tank Transfer Test	WP012 06
Line Maintenance Procedure	A1-F18AC-LMM-000

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Disassembly	3

Record of Applicable Technical Directives

None

1. REMOVAL AND INSTALLATION.**Support Equipment Required**

None

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29513-222
Packing (2)	MS29513-226
Packing (4)	M25988/1-312
Petrolatum, Technical	VV-P-236 (CAGE 81348)

2. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove coupling (2, figure 1, detail A) (013 00) and packings (1).
- c. Remove bolts (4) and washers.
- d. Remove bolts (7 or 10), spacers (8), and attaching parts.
- e. Remove jet ejector (6).

3. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings with petrolatum.
- c. Prepare bolts (4 and 7 or 10, figure 1, detail A) and washers for electrical bond (A1-F18AC-LMM-000).
- d. Install packings (1, 5, and 9).



On 2760102-103 ejector, two washers must be installed under base at each attach point for correct operation of pump.

- e. On 2760102-103 ejector, install ejector (6), spacers (8), washers under base at each attach point, and bolts (10) and washers.
- f. On 2760102-109 or 2760102-107, install ejector (6), spacers (8), bolts (7), and washers.
- g. Install coupling (2) and packings (1).
- h. Install bolts (4) and washers.
- i. Do no. 4 fuel tank aft access cover and tank entry procedure installation (WP008 00).
- j. Do no. 4 fuel tank transfer test (A1-F18AC-460-200, WP012 06).

4. INSPECTION. (2760102-109 AND 2760102-107)**Support Equipment Required**

None

Materials Required

None

- a. Remove ejector (6, figure 1, detail A) per paragraph 2.
- b. Inspect seat assembly (1, figure 2) for conditions listed below:
 - (1) Flapper assembly seals against seat.
 - (2) Flapper assembly not damaged.
 - (3) Seat assembly not damaged.

5. REPAIR. (2760102-109 AND 2760102-107)**Support Equipment Required**

None

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29513-041
Petrolatum, Technical	VV-P-236 (CAGE 81348)

NOTE

Repair of 2760102-109 and 2760102-107 ejector is limited to replacement of parts.

6. DISASSEMBLY.

a. If seat assembly (1, figure 2) is damaged, remove per substeps below:

(1) Remove screws (6).

(2) Remove retainer (5), retaining ring (4), and inlet assembly (3) with seat assembly (1).

b. Remove packing (2) from seat assembly (1).

7. ASSEMBLY.

Petrolatum

1

a. Lubricate packing (2, figure 2) with petrolatum.

b. Install packing (2) on seat assembly (1).

c. Install seat assembly (1), inlet assembly (3), retaining ring (4), and retainer (5) with screws (6).

d. Install ejector (6, figure 1, detail A) per paragraph 3.

8. ILLUSTRATED PARTS BREAKDOWN.

9. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

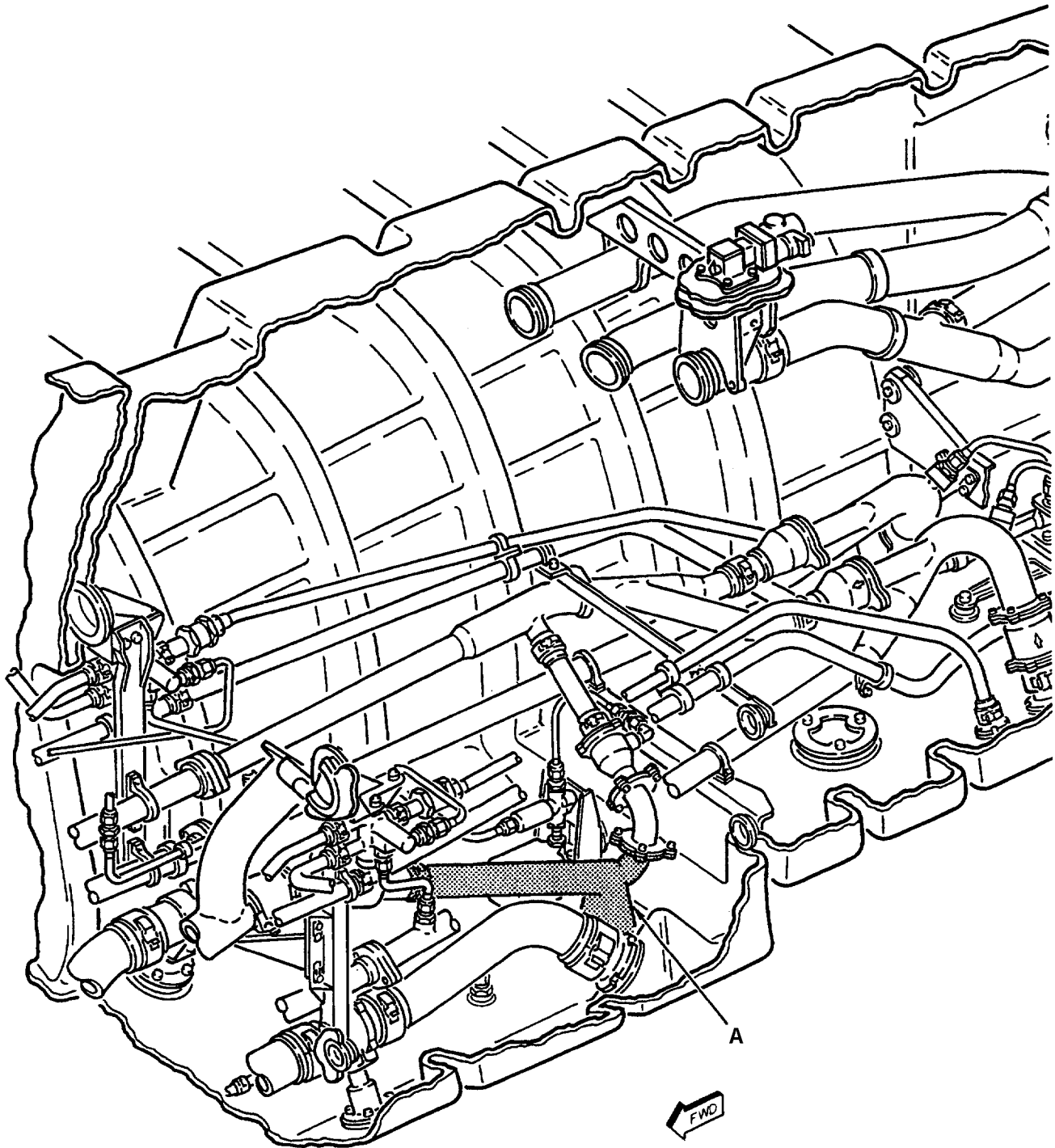


Figure 1. No. 4 Fuel Tank Transfer Jet Ejector (5BAP567) (Sheet 1)

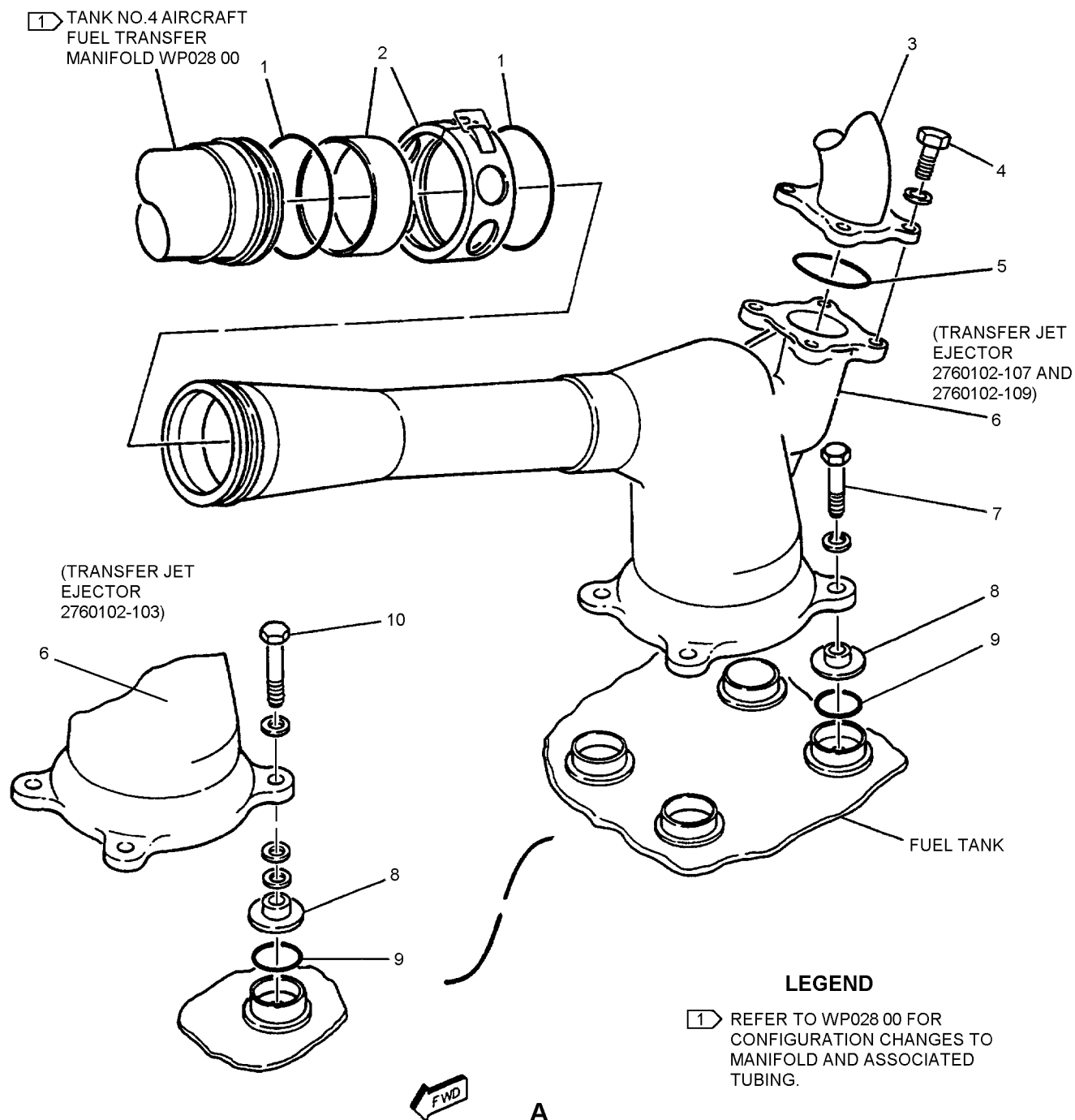


Figure 1. No. 4 Fuel Tank Transfer Jet Ejector (5BAP567) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 4 FUEL TANK TRANSFER JET EJECTOR (5BAP567)			
1	MS29513-226	. PACKING	2		PAOZZ
2	W901K32DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-32D) (INCLUDES SLEEVE)	1	*	PAOZZ
	14J12-32A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-32D) (INCLUDES SLEEVE)	1	*	PAOZZ
3	74A586405-1007	. ELBOW, FLANGE - FUEL TRANSFER PUMP (76301)	1		PAOZZ
	74A586405-1003	. ELBOW, FLANGE - FUEL TRANSFER PUMP (76301)	1	*	PAOZZ
	74A586405-1001	. SEE ABOVE	1	*	PAOZZ
4	NAS674V4	. BOLT	4		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 4)	4		PAOZZ
5	MS29513-222	. PACKING	1		PAOZZ
6	2760102-109	. EJECTOR, JET - FUSELAGE FUEL TRANSFER (NO. 4 FUEL TANK TRANSFER JET EJECTOR) (92003) (MCDONNELL SPEC 74-580112-123) (SEE FIGURE 2 FOR REPAIR OF 2760102-109 AND 2760102-107) (5BAP567) (REPLACES 2760102-103)	1		PAOOO
	2760102-107	. SEE ABOVE	1	*	PAOOO
	2760102-103	. SEE ABOVE (MCDONNELL SPEC 74-580112-117) (USE UNTIL EXHAUSTED)	1	A	PAOZZ
7	NAS674V11 @	. BOLT (AP)	4		PAOZZ
	AN960JD416 @	. WASHER (AP)	4		PAOZZ
8	74A586650-2001	. SPACER, TRANSFER PUMP MOUNTING (76301)	4		PAOZZ
9	M25988/1-312	. PACKING	4		PAOZZ
10	NAS674V11 +	. BOLT (AP)	4		PAOZZ
	AN960JD416 +	. WASHER (AP) (ONE WASHER UNDER BOLT AND 2 UNDER BASE OF JET EJECTOR)	12		PAOZZ

@ USE WITH 2760102-107 AND 2760102-109 JET.
EJECTOR.

+ USE WITH 2760102-103 JET EJECTOR.

* ALTERNATE OR EQUIVALENT PARTS
(WP002 00)

CODE	USABLE ON	MODEL
A	161353 THRU 161761	F/A-18A/B

Figure 1. No. 4 Fuel Tank Transfer Jet Ejector (5BAP567) (Sheet 3)

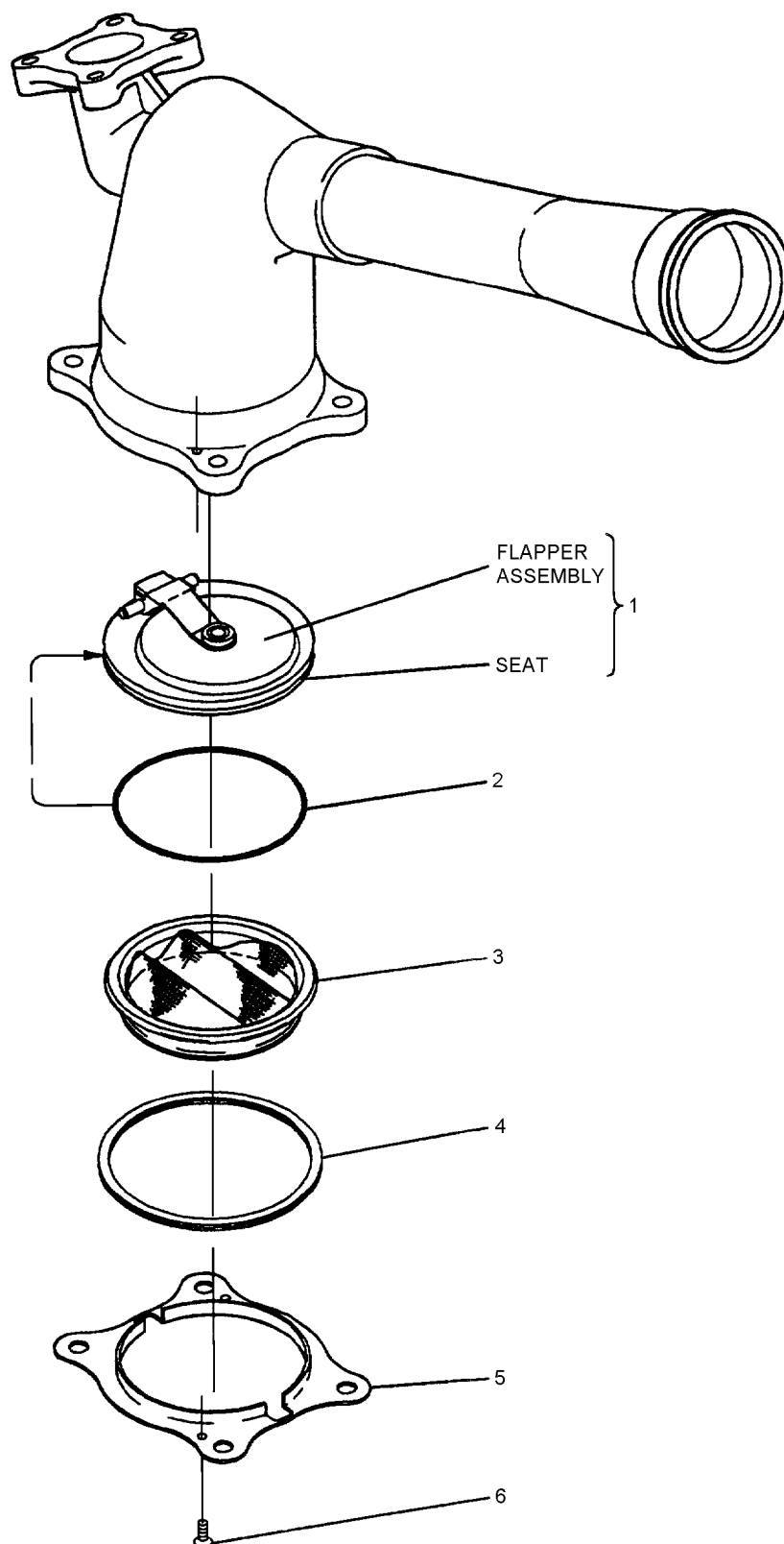


Figure 2. No. 4 Fuel Tank Transfer Jet Ejector Repair - 2760102-109
and 2760102-107 (5BAP567) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		NO. 4 FUEL TANK TRANSFER JET									
		EJECTOR REPAIR - 2760102-109 AND									
		2760102-107 (5BAP567)									
1	2822026-102	.							1		PAOZZ
2	MS29513-041	.							1		PAOZZ
3	2823383-101	.							1		XAOZZ
4	M27426-3178D	.							1		PAOZZ
5	2823384-101	.							1		XAOZZ
6	MS24693C26	.							2		PAOZZ

**Figure 2. No. 4 Fuel Tank Transfer Jet Ejector Repair - 2760102-109
and 2760102-107 (5BAP567) (Sheet 2)**

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 4 FUEL TANK TRANSFER JET EJECTOR (5BAP567)

INTERNAL FUEL TRANSFER SYSTEM

EFFECTIVITY: 161983 AND UP; ALSO 161353 THRU 161982 AFTER F/A-18
IAFC 017 PART 1 AND PART 2

Reference Material

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Aft Access Cover and Tank Entry Procedure	WP008 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-200
No. 4 Fuel Tank Transfer Test	WP012 00

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 83	-
F/A-18 IAFC 017 Part 1 and Part 2	19 Jul 84	Fuel System Tank No. 4 Fuel Transfer Manifold, Modification of (ECP MDA-F/A-18-00084R1)	1 Jun 84	-

1. REMOVAL AND INSTALLATION.**Support Equipment Required**

None

Materials Required

Nomenclature	Specification or Part Number
Cheesecloth	CCC-C-440, Type 1, Class 1 (CAGE 81348)
Isopropyl Alcohol	TT-I-735
Packing (2)	M25988/1-107
Packing (4)	M25988/1-312
Packing	MS29513-222
Packing (3)	MS29513-226
Petrolatum, Technical	VV-P-236 (CAGE 81348)
Sealing Compound	MIL-S-8802, Type 2 Class 1/2 (CAGE 81349)

2. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Do no. 4 fuel tank aft access cover and tank entry procedure removal (WP008 00).
- c. Remove bolts (5, figure 1, detail A) and washers and packing (7).
- d. On 162415 AND UP, do substeps below:
 - (1) Remove bolts (9, detail B), washers, spacers (10), and packings (11).
 - (2) Remove coupling (4, detail A), manifold (3), and packings (2).
 - (3) Remove ejector (8).
- e. On 161353 THRU 161741, do substeps below:
 - (1) Remove bolts (13 and 17, detail B), washers, spacers (14 and 15), and packings (11 and 16).

(2) Remove coupling (4, detail A), manifold (3), and packings (2).

(3) Remove ejector (8).

f. On 161983 THRU 162414; ALSO 161742 THRU 161982, do substeps below:

(1) Remove bolts (18 and 22, detail B), washers, spacers (19 and 20), and packings (11 and 21).

(2) Remove couplings (4, detail A), manifold (3), and packings (2).

(3) Remove ejector (8).

3. INSTALLATION.

a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings with petrolatum.
- c. Install packings (11, figure 1, detail B).
- d. Install packings (2, detail A), manifold (3), and coupling (4).
- e. On 162415 AND UP, do substeps below:



To prevent damage on 2760102-103 ejector, two washers must be installed under base at each attach point for correct operation of ejector.

(1) On 2760102-103 ejector, install ejector (8, detail B), spacers (10), washers (12) under base at each attach point, bolts (9) and washers.

(2) On 2760102-107 or 2760102-109, install ejector (8), spacers (10), bolts (9), and washers.

f. On 161353 THRU 161741, do substeps below:

(1) Apply sealant to bolt (13, detail B) threads per paragraph 4. (QA)



To prevent damage on 2760102-103 ejector, two washers must be installed under base at each attach point for correct operation of ejector.

(2) On 2760102-103 ejector, install ejector (8), spacers (14 and 15), packings (16), washers (12) under base at each attach point, bolts (13 and 17), and washers.

(3) On 2760102-107 or 2760102-109, install ejector (8), spacers (14 and 15), packings (16), bolts (13 and 17), and washers.

g. On 161983 THRU 162414; ALSO 161742 THRU 161982, do substeps below:

(1) Apply sealant to bolt (18, detail B) threads per paragraph 4. (QA)



To prevent damage on 2760102-103 ejector, two washers must be installed under base at each attach point for correct operation of ejector.

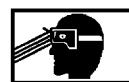
(2) On 2760102-103 ejector, install ejector (8), spacers (19 and 20), packing (21), washers (12) under base at each attach point, bolts (18 and 22) and washers.

(3) On 2760102-107 or 2760102-109, install ejector (8), spacers (19 and 20), packing (21), bolts (18 and 22), and washers.

h. Do no. 4 fuel tank aft access cover and tank entry procedure installation (WP008 00).

i. Do no. 4 fuel tank transfer test (A1-F18AC-460-200, WP012 00).

4. BOLT SEALING.



Isopropyl Alcohol

2



Bolts should be sealed at bolt threads to prevent fuel leaks.

a. Clean bolt (13 or 18, figure 1, detail B) threads with cheesecloth moistened with isopropyl alcohol. Wipe with clean, dry cheesecloth before isopropyl alcohol evaporates. Repeat procedure until no visible contamination remains.



Sealing Compound

3



To prevent fuel leaks, sealing compound should not contact fuel tank or cavity fitting packing sealing surfaces.

Sealing compound shall be lightly applied to threads of bolt to prevent filling fitting bolt hole full of sealing compound.

b. Lightly coat threads of bolt with sealing compound, then install bolt.

c. Remove excess sealing compound with cheesecloth moistened with isopropyl alcohol.

5. INSPECTION. (2760102-109 AND 2760102-107)

Support Equipment Required

None

Materials Required

None

a. Remove ejector (8, figure 1, detail A) per paragraph 2.

b. Inspect seat assembly (1, figure 2) for conditions listed below:

- (1) Flapper assembly seals against seat.
- (2) Flapper assembly not damaged.
- (3) Seat assembly not damaged.

6. **REPAIR.** (2760102-109 AND 2760102-107)

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29513-041
Petrolatum, Technical	VV-P-236 (CAGE 81348)

NOTE

Repair of 2760102-109 and 2760102-107 ejector is limited to replacement of parts.

7. **DISASSEMBLY.**

a. If seat assembly (1, figure 2) is damaged, remove per substeps below:

(1) Remove screws (6).

(2) Remove retainer (5), retaining ring (4), and inlet assembly (3) with seat assembly (1).

b. Remove packing (2) from seat assembly (1).

8. **ASSEMBLY.**



Petrolatum

1

a. Lubricate packing (2, figure 2) with petrolatum.

b. Install packing (2) onto seat assembly (1).

c. Install seat assembly (1), inlet assembly (3), retaining ring (4), and retainer (5) with screws (6).

d. Install ejector (8, figure 1, detail B) per paragraph 3.

9. **ILLUSTRATED PARTS BREAKDOWN.**

10. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

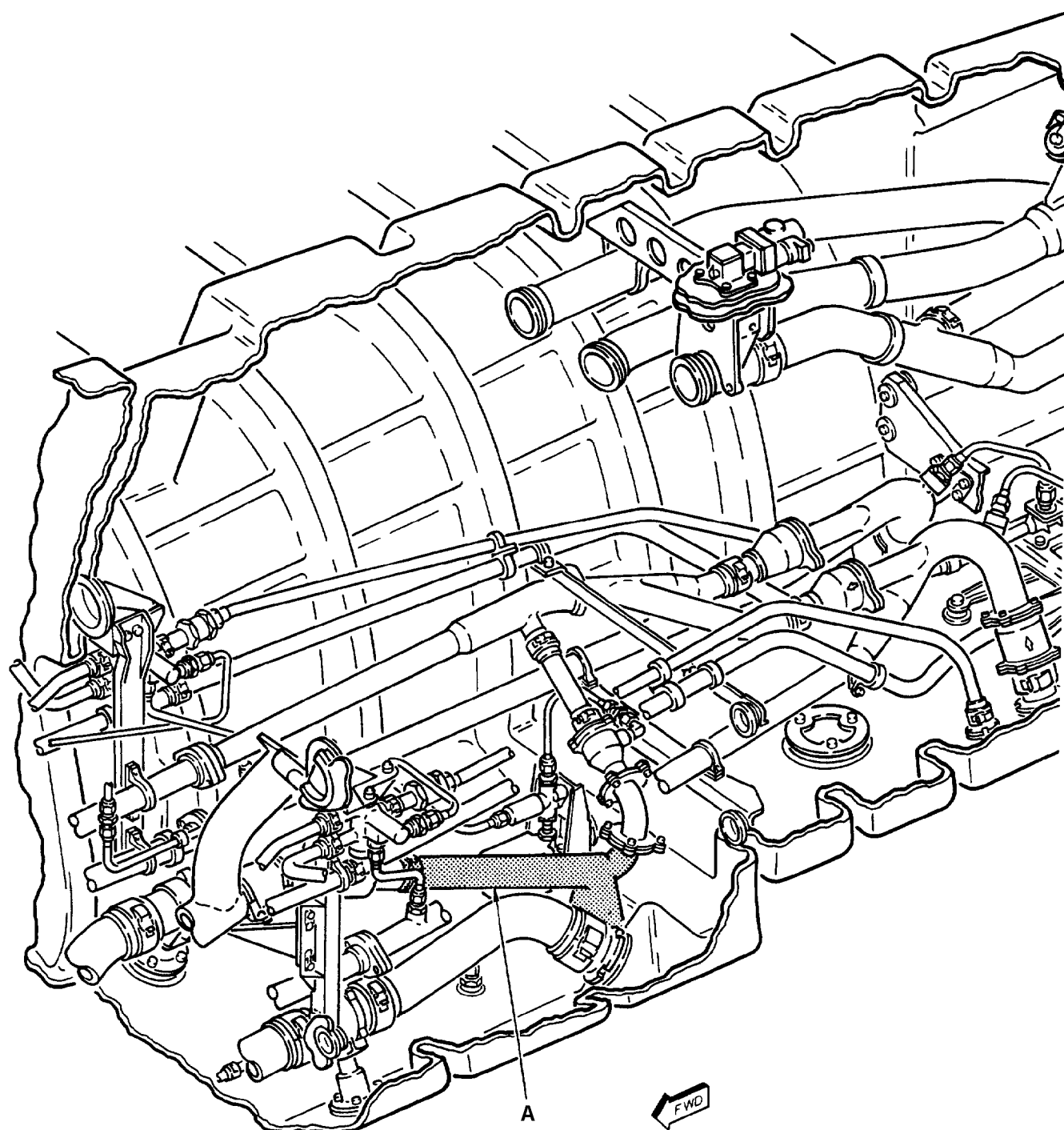


Figure 1. No. 4 Fuel Tank Transfer Jet Ejector (5BAP567) (Sheet 1)

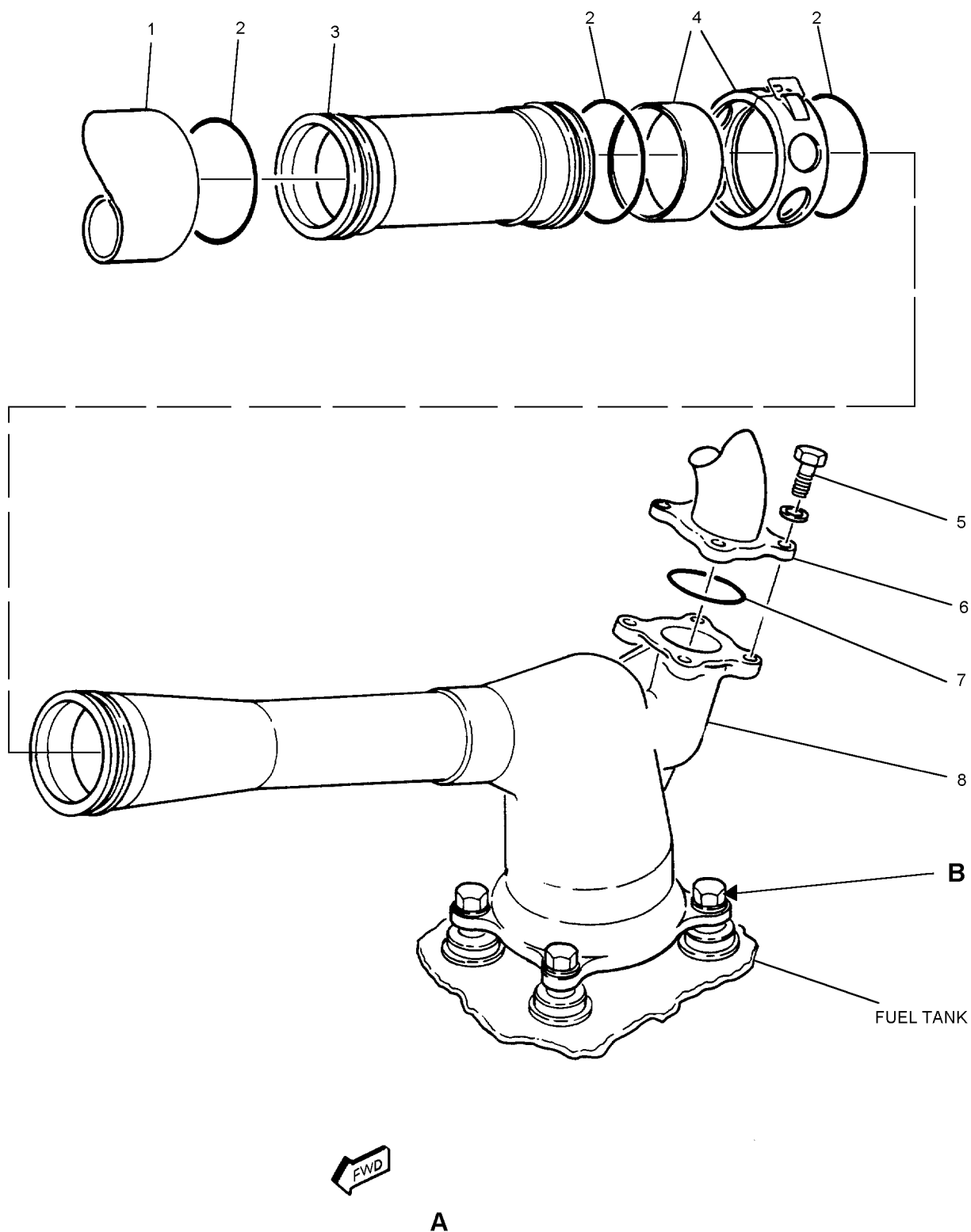
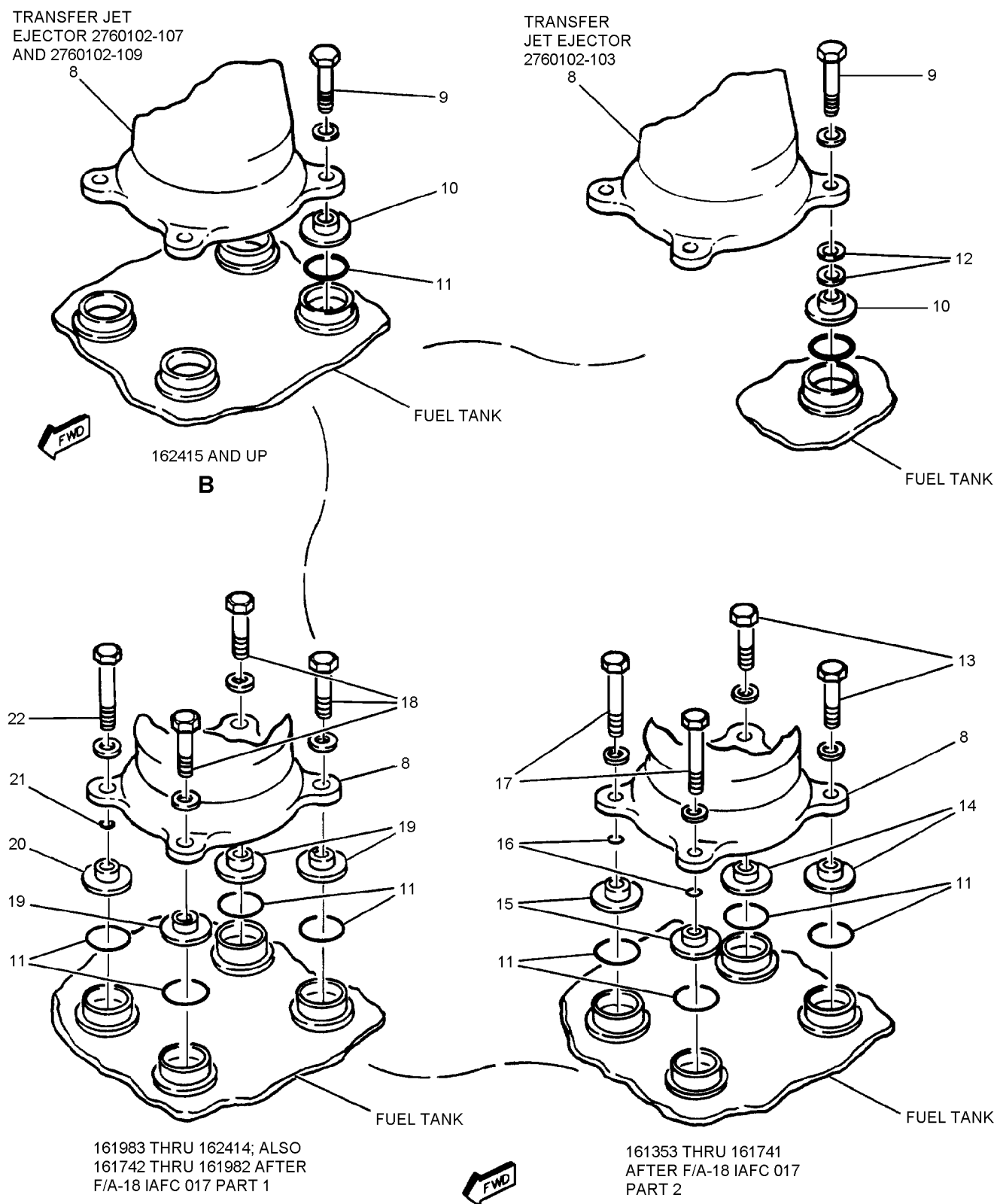


Figure 1. No. 4 Fuel Tank Transfer Jet Ejector (5BAP567) (Sheet 2)



INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 4 FUEL TANK TRANSFER JET EJECTOR (5BAP567)			
1	74A586482-1017	. MANIFOLD, FLUID, AIRCRAFT FUEL TRANSFER, TANK NO. 4 (76301)	1		PAOZZ
2	MS29513-226	. PACKING	3		PAOZZ
3	74A586482-1009	. MANIFOLD, FLUID, AIRCRAFT FUEL TRANSFER, TANK NO. 4 (76301)	1		PAOZZ
4	W901K32DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-32D) (INCLUDES SLEEVE)	1	*	PAOZZ
	14J12-32A	. SEE ABOVE (24984)	1	*	PAOZZ
5	NAS674V4	. BOLT	4		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 5)	4		PAOZZ
6	74A586405-1007	. ELBOW, FLANGE - FUEL TRANSFER PUMP (76301)	1		PAOZZ
	74A586405-1003	. SEE ABOVE	1	*	PAOZZ
	74A586405-1001	. SEE ABOVE	1	*	PAOZZ
7	MS29513-222	. PACKING	1		PAOZZ
8	2760102-109	. EJECTOR, JET - FUSELAGE FUEL TRANSFER (NO. 4 FUEL TANK TRANSFER JET EJECTOR) (92003) (MCDONNELL SPEC 74-580112-123) (5BAP567) (SEE FIGURE 2 FOR REPAIR OF 2760102-109 AND 2760102- 107) (REPLACES 2760102-103)	1		PAOOO
	2760102-107	. SEE ABOVE	1	*	PAOOO
	2760102-103	. SEE ABOVE (MCDONNELL SPEC 74-580112-117) (USE UNTIL EXHAUSTED)	1	D	PAOZZ
9	NAS674V11	. BOLT	4	A	PAOZZ
	AN960JD416	. WASHER (USE WITH INDEX 9)	4		PAOZZ
10	74A586650-2001	. SPACER, TRANSFER PUMP MOUNTING (76301)	4	A	PAOZZ
11	M25988/1-312	. PACKING	4		PAOZZ
12	AN960JD416L +	. WASHER	8		PAOZZ
13	NAS674V11	. BOLT	2	B	PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 13)	2		PAOZZ
14	74R585003-2003	. SPACER (76301)	2	B	PAOZZ
15	74R585003-2001	. SPACER (76301)	2	B	PAOZZ
16	M25988/1-107	. PACKING	2	B	PAOZZ
17	NAS674V22	. BOLT	2	B	PAOZZ
	AN960JD416L	. WASHER	2		PAOZZ
18	NAS674V11	. BOLT	3	C	PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 18)	3		PAOZZ
19	74R585003-2003	. SPACER (76301)	3	C	PAOZZ
20	74R585003-2001	. SPACER (76301)	1	C	PAOZZ
21	M25988/1-107	. PACKING	1	C	PAOZZ
22	NAS674V22	. BOLT	1	C	PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 22)	1		PAOZZ

+ ON 2760102-103 EJECTOR, TWO WASHERS MUST
BE INSTALLED UNDER BASE AT EACH ATTACH
POINT.

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

Figure 1. No. 4 Fuel Tank Transfer Jet Ejector (5BAP567) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

CODE	USABLE ON	MODEL
A	162415 & UP	F/A-18A/B
B	161353 THRU 161741 AFTER F/A-18 IAFC 017 PART 2	F/A-18A/B
C	161983 THRU 162414; ALSO 161742 THRU 161982 AFTER F/A-18 IAFC 017 PART 1	F/A-18A/B
D	161353 THRU 161761	F/A-18A/B

Figure 1. No. 4 Fuel Tank Transfer Jet Ejector (5BAP567) (Sheet 5)

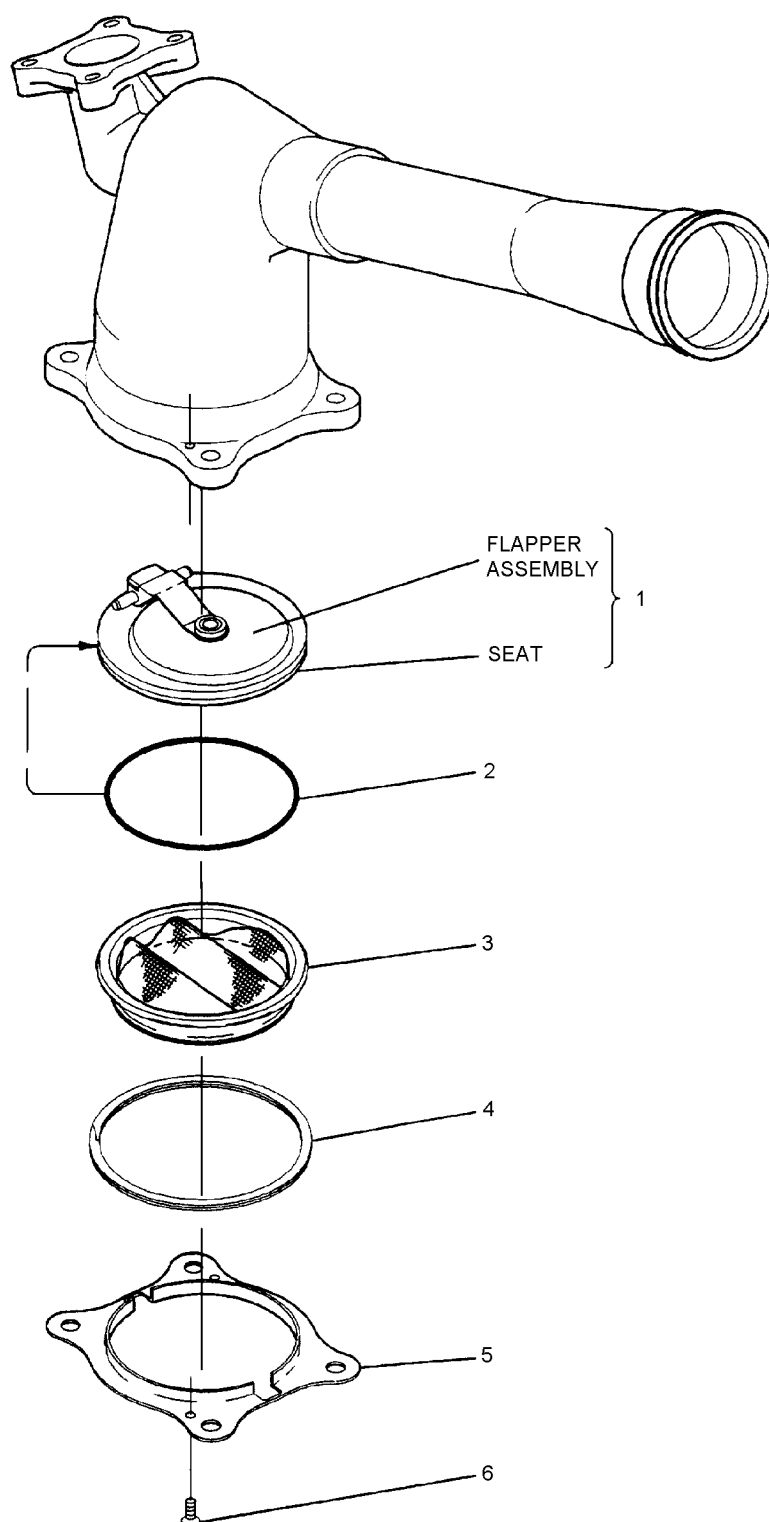


Figure 2. No. 4 Fuel Tank Transfer Jet Ejector Repair - 2760102-109 and 2760102-107 (5BAP567) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		NO. 4 FUEL TANK TRANSFER JET									
		EJECTOR REPAIR - 2760102-109 AND									
		2760102-107 (5BAP567)									
1	2822026-102	.	SEAT ASSEMBLY (92003)						1		PAOZZ
2	MS29513-041	.	PACKING						1		PAOZZ
3	2823383-101	.	INLET ASSEMBLY (192003)						1		XAOZZ
4	M27426-3178D	.	RING, RETAINING (81349)						1		XAOZZ
5	2823384-101	.	RETAINER (92003)						1		XAOZZ
6	MS24693-C26	.	SCREW						2		PAOZZ

**Figure 2. No. 4 Fuel Tank Transfer Jet Ejector Repair - 2760102-109
and 2760102-107 (5BAP567) (Sheet 2)**

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****WING FUEL GRAVITY CHECK VALVE (5VAP587 OR 5VAR588)****INTERNAL FUEL TRANSFER SYSTEM**

Reference Material

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Aft Access Cover and Tank Entry Procedure	WP008 00
Fuel Tank Maintenance Precautions and General Preparations	WP013 00

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 83	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29513-326
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.**NOTE**

Procedure for left check valve. Right check valve same.

- a. Do general preparation for removal (WP013 00).
- b. Do no. 4 fuel tank aft access cover and tank entry procedure removal (WP008 00).
- c. Remove nut assembly (1, figure 1), packing (2), and check valve (housing assembly) (3).
- d. Remove shield (4) and attaching parts from check valve (3).

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packing (2) with petrolatum.
- c. Install shield (4, figure 1) and attaching parts on check valve (3).
- d. Install packing (2), nut assembly (1), and check valve (housing assembly) (3). Handtighten nut (1).
- e. Visually inspect valve (3) for freedom of movement.
- f. Do no. 4 fuel tank aft access cover and tank entry procedure installation (WP008 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

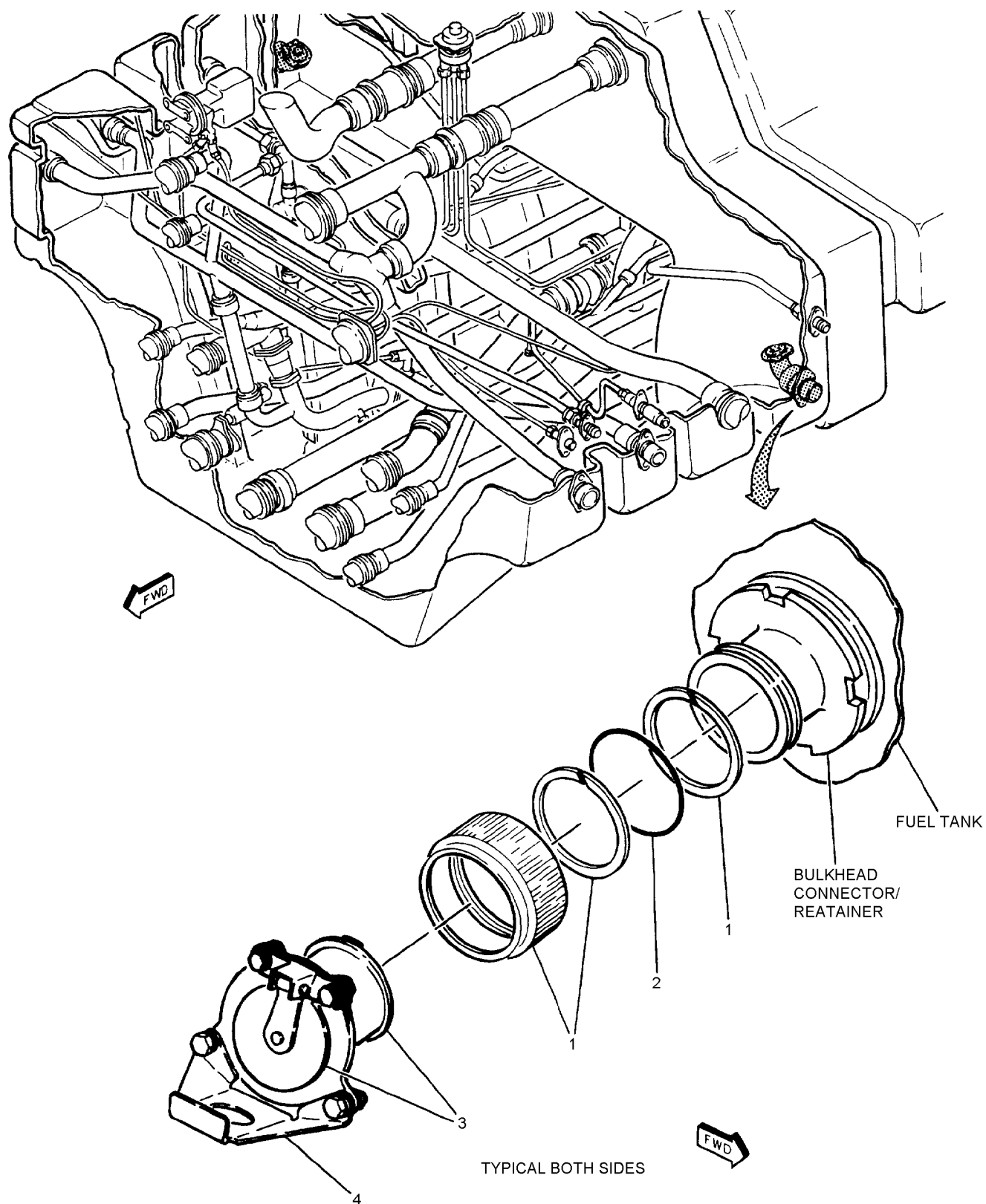


Figure 1. Wing Fuel Gravity Check Valve (5VAP587 or 5VAR588) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		WING FUEL GRAVITY CHECK VALVE			
		(5VAP587 OR 5VAR588)			
1	W702-24D	. NUT ASSEMBLY, TUBE COUPLING (79326)	1	*	PAOZZ
		(MCDONNELL SPEC ST7M191-24D)			
		(INCLUDES NUT AND 2 WASHERS)			
	12H72-24D	. SEE ABOVE (24984)	1	*	PAOZZ
2	MS29513-326	. PACKING	1		PAOZZ
3	74A585004-2005	. HOUSING ASSEMBLY (WING FUEL	1		PAOZZ
		GRAVITY CHECK VALVE) (76301)			
		(5VAP587 OR 5VAR588)			
	NAS1802-06-7	. SCREW (USE WITH INDEX 3)	2		PAOZZ
	AN960JD6L	. WASHER (USE WITH INDEX 3)	4		PAOZZ
	NAS1291C06M	. NUT (USE WITH INDEX 3)	2		PAOZZ
4	74A586429-2125	. SHIELD (76301)	1		XAOZZ
	NAS1802-06-7	. SCREW (AP)	2		PAOZZ
	AN960JD6L	. WASHER (AP)	4		PAOZZ
	NAS1291C06M	. NUT (AP)	2		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

Figure 1. Wing Fuel Gravity Check Valve (5VAP587 or 5VAR588) (Sheet 2)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

ENGINE TRANSFER MOTIVE FLOW CHECK VALVE (5VAP563 OR 5VAR564)

INTERNAL FUEL TRANSFER SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Aft Access Cover and Tank Entry Procedure	WP008 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-200
No. 4 Fuel Tank Fuel Transfer Test	WP012 06
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 83	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (2)	MS29513-218
Packing (6)	MS29513-222
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.**NOTE**

This procedure is for left engine motive flow check valve. Right engine motive flow check valve is opposite.

- a. Do general preparation for removal (WP013 00).
- b. Do no. 4 fuel tank aft access cover and tank entry procedure removal (WP008 00).
- c. Remove clamp (7, figure 1, detail A) and attaching parts.
- d. Remove couplings (2) and packings (3).
- e. Remove coupling (8) and packings (9).
- f. Remove bolts (11), attaching parts, and manifold (1).
- g. Remove bolts (5), attaching parts, and check valve (6).

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings with petrolatum.
- c. Prepare mating surfaces of check valve (6, figure 1, detail A), manifold (4), bolts (5), and washers for electrical bond (A1-F18AC-LMM-000).
- d. Install packing (3).
- e. Install check valve (6), bolts (5), and attaching parts.
- f. Install packings (3 and 9).
- g. Install manifold (1), couplings (2 and 8) and bolts (11) and washers.
- h. Install clamp (7) and attaching parts.
- i. Do no. 4 fuel tank aft access cover and tank entry procedure installation (WP008 00).
- j. Do no. 4 fuel tank fuel transfer test (A1-F18AC-460-200, WP012 06).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

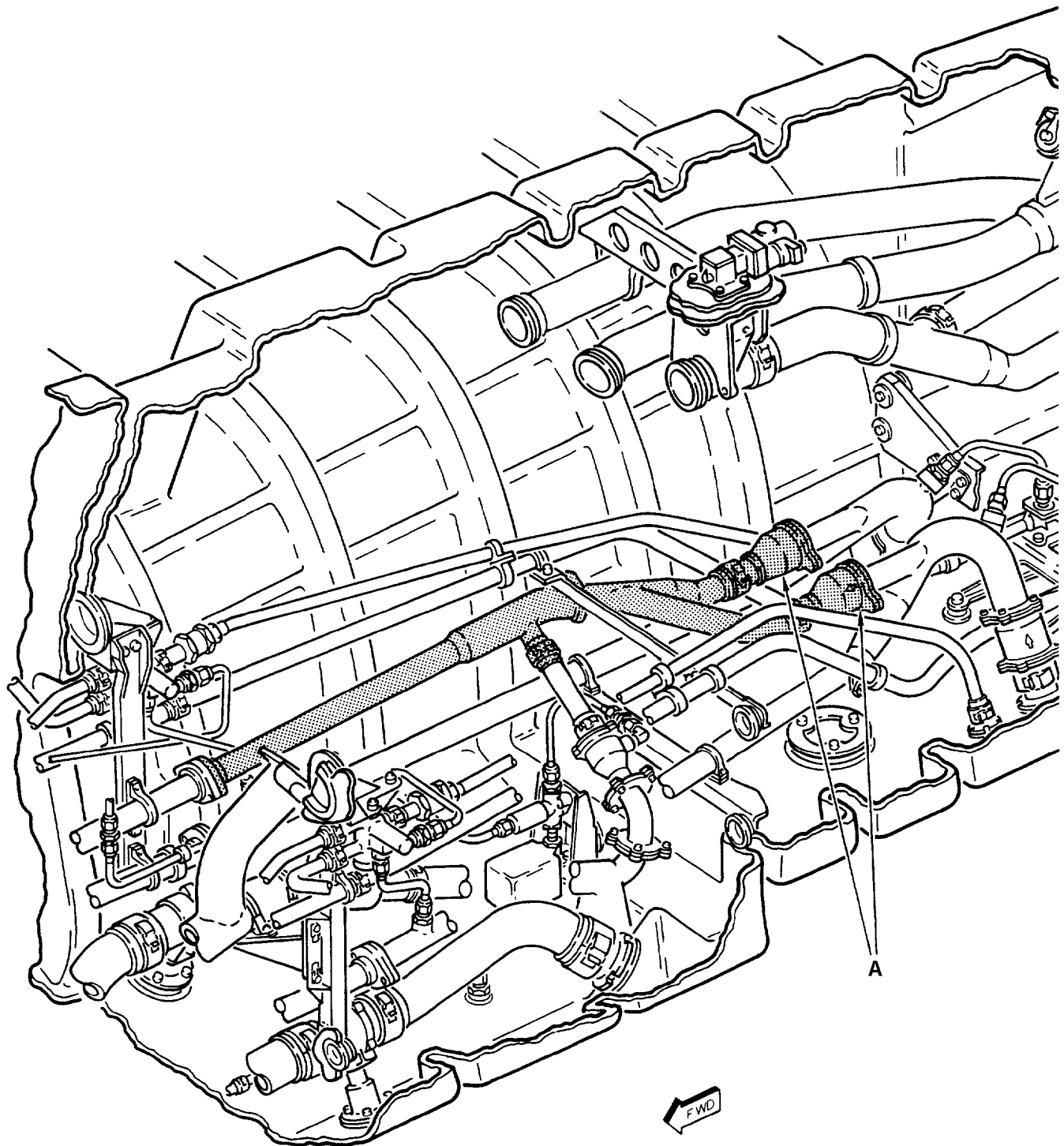


Figure 1. Engine Transfer Motive Flow Check Valve (5VAP563 or 5VAR564) (Sheet 1)

1200001A

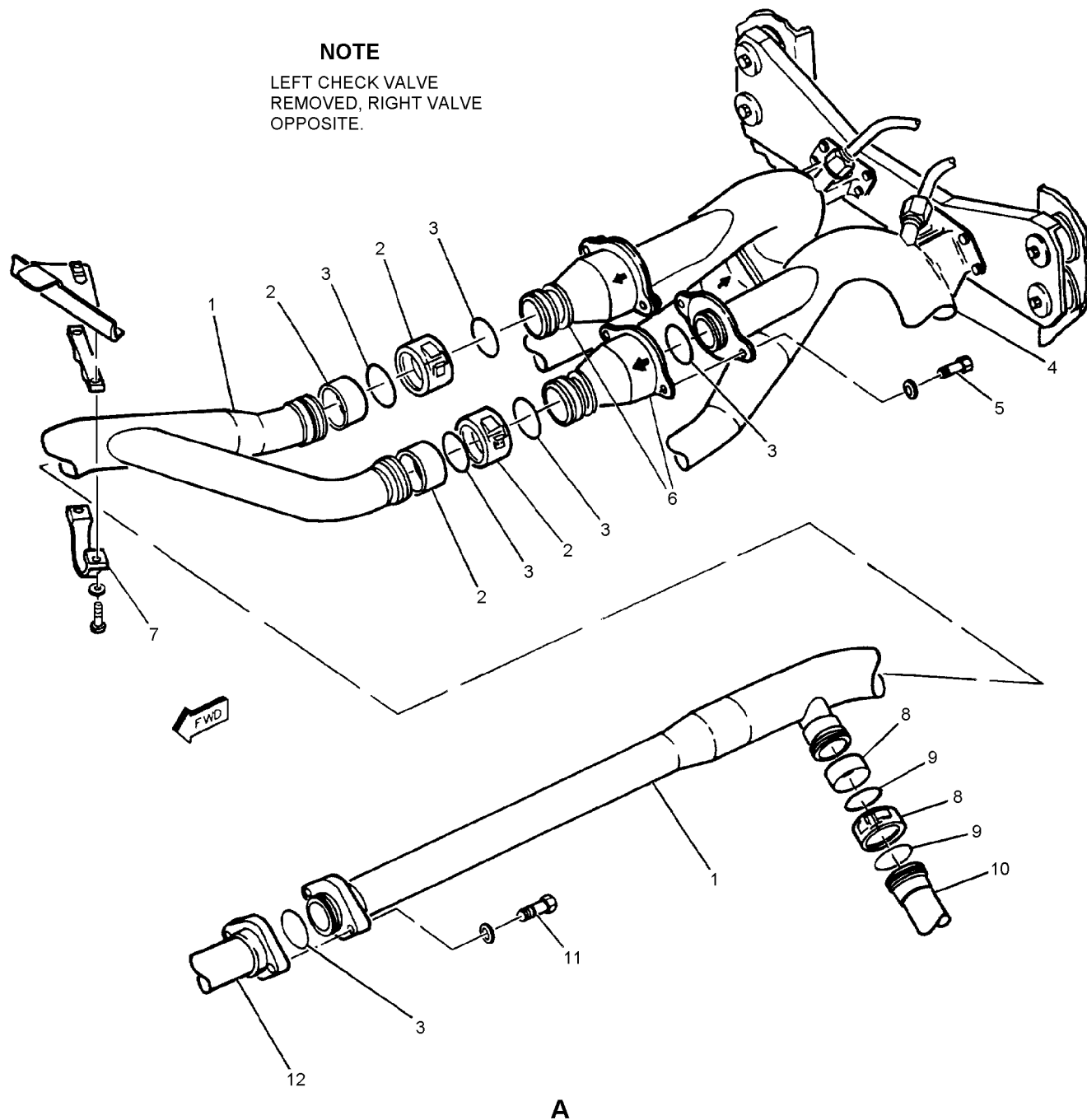


Figure 1. Engine Transfer Motive Flow Check Valve (5VAP563 or 5VAR564) (Sheet 2)

1200001B

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		ENGINE TRANSFER MOTIVE FLOW CHECK			
		VALVE (5VAP563 OR 5VAR564)			
1	74A586492-1013	. MANIFOLD, FLUID, AIRCRAFT MOTIVE	1		PAOZZ
		FLOW BOOST XFR, FUEL (76301)			
		(SUPERSEDES 74A586492-1009)			
2	W901K24DE	. COUPLING, CLAMP, GROOVED (79326)	2	*	PAOZZ
		(MCDONNELL SPEC 7M765-24D)			
		(INCLUDES SLEEVE)			
	14J12-24A	. COUPLING, CLAMP, GROOVED (24984)	2	*	PAOZZ
		(MCDONNELL SPEC 7M765-24D)			
		(INCLUDES SLEEVE)			
3	MS29513-222	. PACKING	6		PAOZZ
4	74A586488-1007	. MANIFOLD, FLUID, AIRCRAFT - MOTIVE	1		PAOZZ
		FLOW BOOST, MAIN, FUEL (76301)			
		(LEFT SIDE) (SUPERSEDES			
		74A586488-1001 & 74A586488-1009)			
	74A586488-1008	. MANIFOLD, FLUID, AIRCRAFT - MOTIVE	1		PAOZZ
		FLOW BOOST, MAIN, FUEL (76301)			
		(RIGHT SIDE) (SUPERSEDES			
		74A586488-1002 & 74A56488-1010)			
5	NAS674V7	. BOLT	4		PAOZZ
	AN960JD416	. WASHER (USE WITH INDEX 5)	4		PAOZZ
6	2760119-103	. VALVE, CHECK - FUEL, LARGE LINE	1		PAOZZ
		MOUNTED, LH OR RH (ENGINE TRANSFER			
		MOTIVE FLOW CHECK VALVE) (92003)			
		(MCDONNELL SPEC 74-580149-107)			
		(5VAP563 OR 5VAR564) (REPLACES			
		2760119-101)			
	2760119-101	. VALVE, CHECK - FUEL, LARGE LINE	1	A	PAOZZ
		MOUNTED LH OR RH (ENGINE TRANSFER			
		MOTIVE FLOW CHECK VALVE) (92003)			
		(MCDONNELL SPEC 74-580149-101)			
		(5VAP563 OR 5VAR564) (USE UNTIL			
		EXHAUSTED)			
7	NAS1787A32G	. CLAMP	1		PAOZZ
	NAS673V9	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
8	W901K20DE	. COUPLING, CLAMP, GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M765-20D)			
		(INCLUDES SLEEVE)			
	14J12-20A	. COUPLING, CLAMP, GROOVED (24984)	1	*	PAOZZ
		(MCDONNELL SPEC 7M765-20D)			
		(INCLUDES SLEEVE)			
9	MS29513-218	. PACKING	2		PAOZZ
10	74A586487-1007	. TUBE ASSEMBLY, METAL - MF TRANSFER,	1		XBOZZ
		TANK 4 (76301) (SUPERSEDES			
		74A586487-1003)			
11	NAS673V3	. BOLT	2		PAOZZ
	AN960JD416	. WASHER (USE WITH INDEX 11)	1		PAOZZ
12	74A586493-1003	. TUBE ASSEMBLY, METAL - MOTIVE FLOW	1		XBOOO
		BOOST, FUEL TRANSFER (76301)			
	MS21209F4-15	. INSERT (USE WITH INDEX 12)	2		PAOZZ

Figure 1. Engine Transfer Motive Flow Check Valve (5VAP563 or 5VAR564) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
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* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161353 THRU 161528	F/A-18A/B

Figure 1. Engine Transfer Motive Flow Check Valve (5VAP563 or 5VAR564) (Sheet 4)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAIN WITH IPB

ENGINE MOTIVE FLOW CHECK VALVE (5VAP561 OR 5VAR562)

INTERNAL FUEL TRANSFER SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Aft Access Cover and Tank Entry Procedure	WP008 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-200
No. 4 Fuel Tank Transfer Test	WP012 06
Line Maintenance Procedures	A1-F18AC-LMM-000
Line Maintenance Access Doors	A1-F18AC-LMM-010
Plane Captain Manual	A1-F18AC-PCM-000

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA F/A-18-00143)	1 Mar 83	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC32 (CAGE 96906)
Packing (2)	MS29513-226
Packing	MS29513-229
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.**NOTE**

This procedure is typical for left or right engine motive flow check valve.

- a. Do general preparation for removal (WP013 00).
- b. Do no. 4 fuel tank aft access cover and tank entry procedure removal (WP008 00).
- c. Remove coupling (5, figure 1, detail A or B), check valve (3), packings (2 and 4), and attaching parts.

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate all new packings with petrolatum.
- c. Prepare attaching parts of check valve (3, figure 1, detail A or B) for electrical bond (A1-F18AC-LMM-000).

- d. Install packings (2) and (4).
- e. Install coupling (5) sleeve on check valve (3).

NOTE

Some check valves are ink stamped THIS SIDE UP on offset side of valve housing.

- f. Install check valve (3) and attaching parts with offset side of housing in up position as shown on detail A and B.

- g. Install coupling (5).

- h. Do no. 4 fuel tank aft access cover and tank entry procedure installation (WP008 00).

- i. Do engine motive flow check valve leak test per paragraph 3.

- j. Do no. 4 fuel tank fuel transfer test (A1-F18AC-460-200, WP012 06).

3. ENGINE MOTIVE FLOW CHECK VALVE LEAK TEST. (QA)

- a. Refuel aircraft (A1-F18AC-PCM-000).
- b. On ELEC power control panel, set BATT switch to ON (figure 2).
- c. On LH and RH advisory and threat warning indicator panel, push L and R engine FIRE warning light.
- d. In L and R MLG wheelwell, visually inspect to make sure both engine fuel shutoff valve manual override arms are in the CLOSED (-) position.
- e. Remove doors 53L and 53R (A1-F18AC-LMM-010).
- f. Position an approved safety container below each cap (3) to catch residual fuel when cap is removed.
- g. Rotate both caps (3) away from structure.

WARNING

To prevent personal injury, do not stand directly under caps when draining residual fuel.

- h. Remove both caps (3) and drain residual fuel (approximately 2 gallons from each side).

- i. Record leakage rate for one minute.
- j. The maximum allowable leakage rate is 300cc.
- k. Install both caps (3) and safety cap with lock-wire if safetying holes exist. (QA)



To prevent damage of tubes next to tube with caps, make sure caps point down.

- l. Rotate cap (3) so that caps (3) are down on left and right sides.
- m. Install doors 53L and 53R (A1-F18AC-LMM-010).
- n. On LH and RH advisory and threat warning indicator panel, release L and R engine FIRE warning light.

- o. In L and R MLG wheelwell, visually inspect to make sure both engine fuel shutoff valve manual override arms are in the OPEN (+) position.



To prevent damage to battery bus contactors and/or batteries, be sure BATT switch is set to OFF and BATT SW caution light is OFF.

- p. On ELEC power control panel, set BATT switch to OFF, BATT SW caution light goes off.

4. ILLUSTRATED PARTS BREAKDOWN.

- 5. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

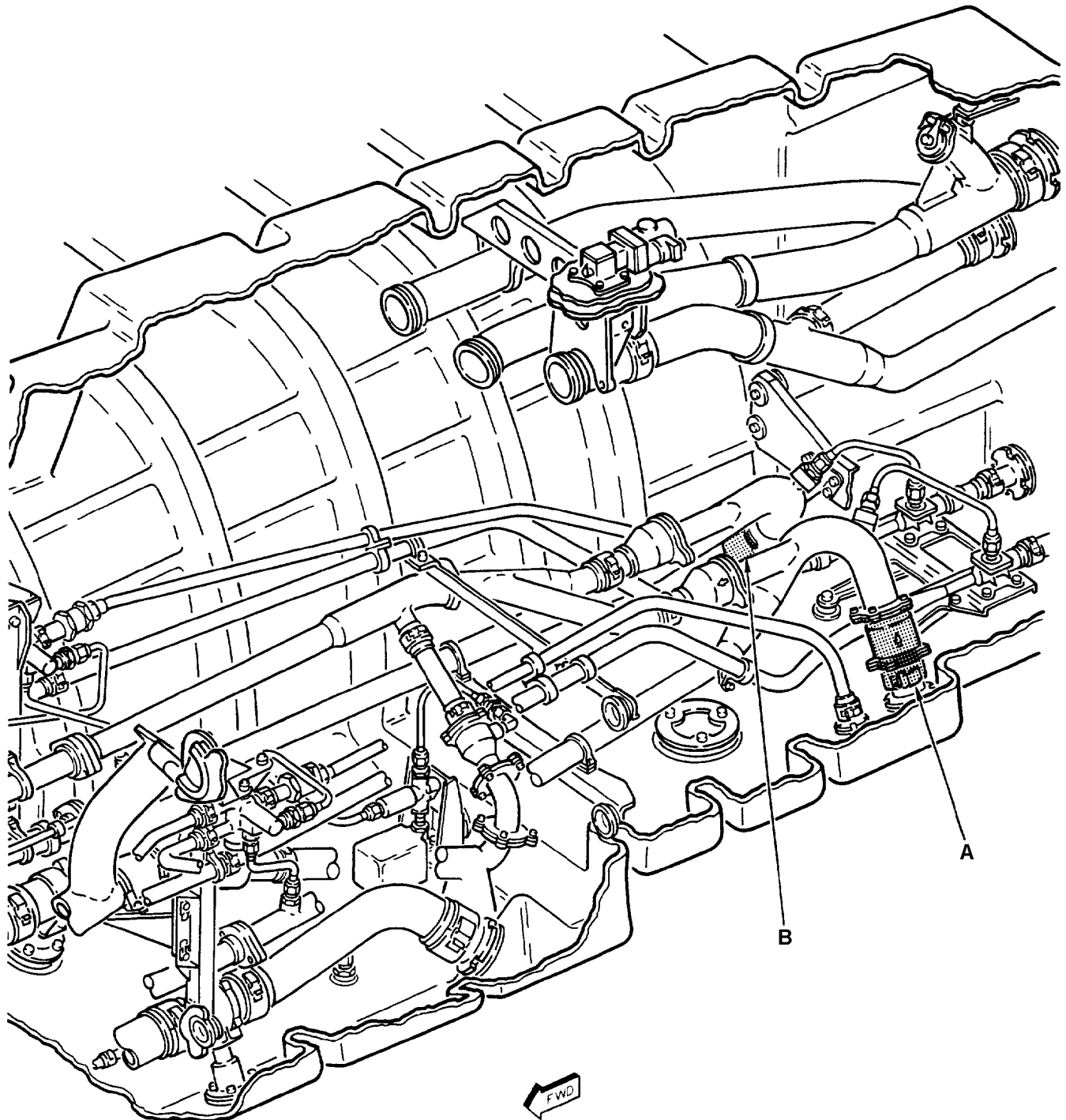


Figure 1. Engine Motive Flow Check Valve (5VAP561 or 5VAR562) (Sheet 1)

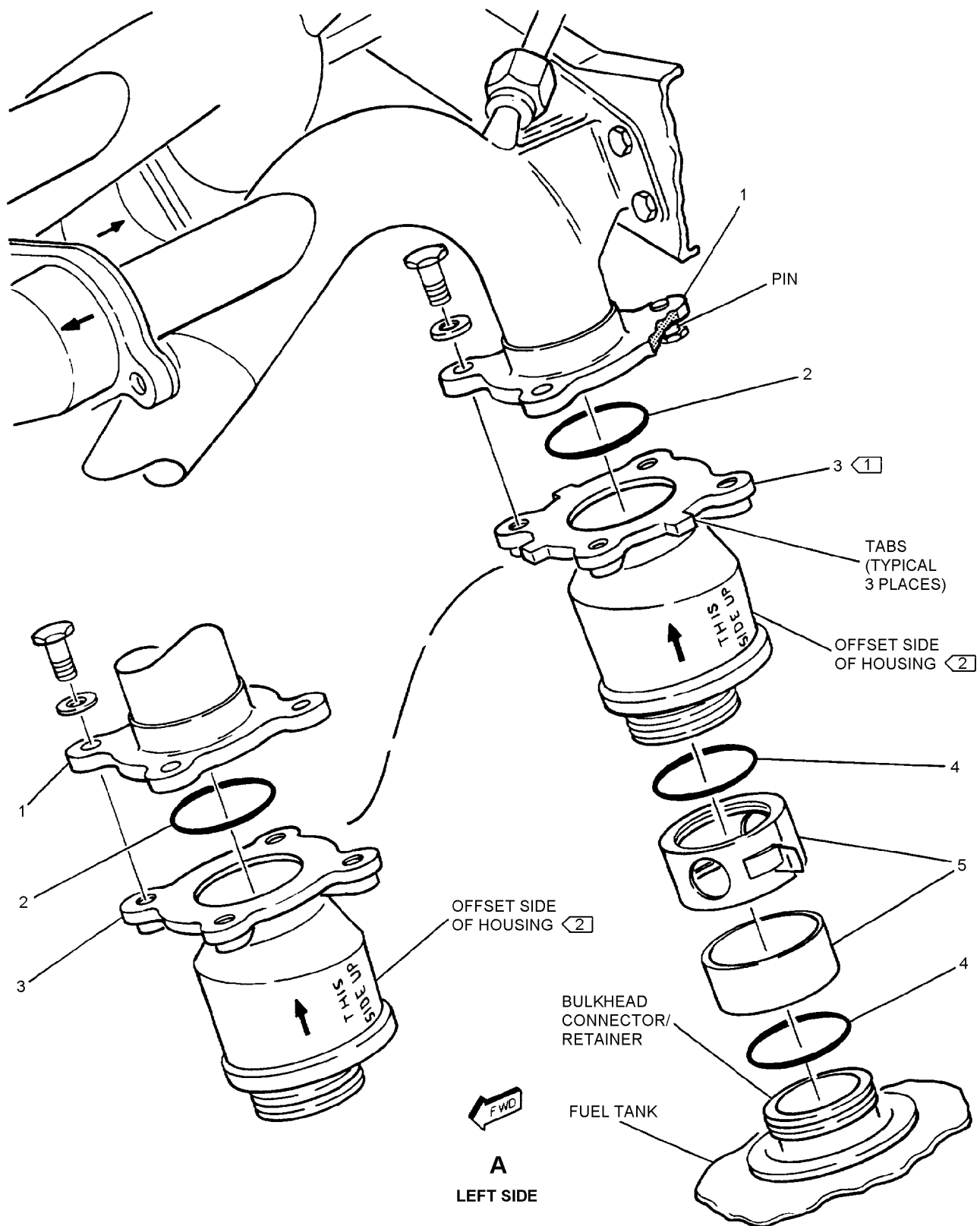


Figure 1. Engine Motive Flow Check Valve (5VAP561 or 5VAR562) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		ENGINE MOTIVE FLOW CHECK VALVE									
		(5VAP561 OR 5VAR562)									
1	74A586488-1007	.	MANIFOLD, FLUID, AIRCRAFT - MOTIVE						1		PAOZZ
			FLOW BOOST, MAIN FUEL (76301)								
			(LEFT SIDE) (SUPERSEDES								
			74A586488-1001 & 74A586488-1009)								
	74A586488-1008	.	MANIFOLD, FLUID, AIRCRAFT - MOTIVE						1		PAOZZ
			FLOW BOOST, MAIN FUEL (76301)								
			(RIGHT SIDE) (SUPERSEDES								
			74A586488-1002 & 74A586488-1010)								
2	MS29513-229	.	PACKING						1		PAOZZ
3	2760120-104	.	VALVE, CHECK - FUEL, LARGE LINE						1		PAOZZ
			MOUNTED (ENGINE MOTIVE FLOW								
			CHECK VALVE) (92003) (MCDONNELL								
			SPEC 74-580149-115) (5VAP561 OR 5VAR562)								
	2760120-103	.	VALVE, CHECK - FUEL, LARGE LINE						1	*	PAOZZ
			MOUNTED (ENGINE MOTIVE FLOW								
			CHECK VALVE) (92003) (MCDONNELL								
			SPEC 74-580149-109) (5VAP561 OR 5VAR562)								
	2760120-101	.	VALVE, CHECK - FUEL, LARGE LINE						1	*	PAOZZ
			MOUNTED (ENGINE MOTIVE FLOW								
			CHECK VALVE) (92003) (MCDONNELL								
			SPEC 74-580149-103) (5VAP561 OR 5VAR562)								
	NAS674V8	.	BOLT (AP)						4		PAOZZ
	AN960JD416	.	WASHER (AP)						4		PAOZZ
4	MS29513-226	.	PACKING						2		PAOZZ
5	W901K32DE	.	COUPLING, CLAMP, GROOVED (79326)						1		PAOZZ
			(MCDONNELL SPEC 7M765-32D)								
			(INCLUDES SLEEVE)								
	14J12-32A	.	COUPLING, CLAMP, GROOVED (24984)						1		PAOZZ
			(MCDONNELL SPEC 7M765-32D)								
			(INCLUDES SLEEVE)								
	W901F32DE	.	COUPLING, CLAMP, GROOVED (79326)						1	*	PAOZZ
			(MCDONNELL SPEC 7M550-32D)								
			(INCLUDES SLEEVE)								

* ALTERNATE OR EQUIVALENT PARTS. (WP002 00)

Figure 1. Engine Motive Flow Check Valve (5VAP561 or 5VAR562) (Sheet 4)

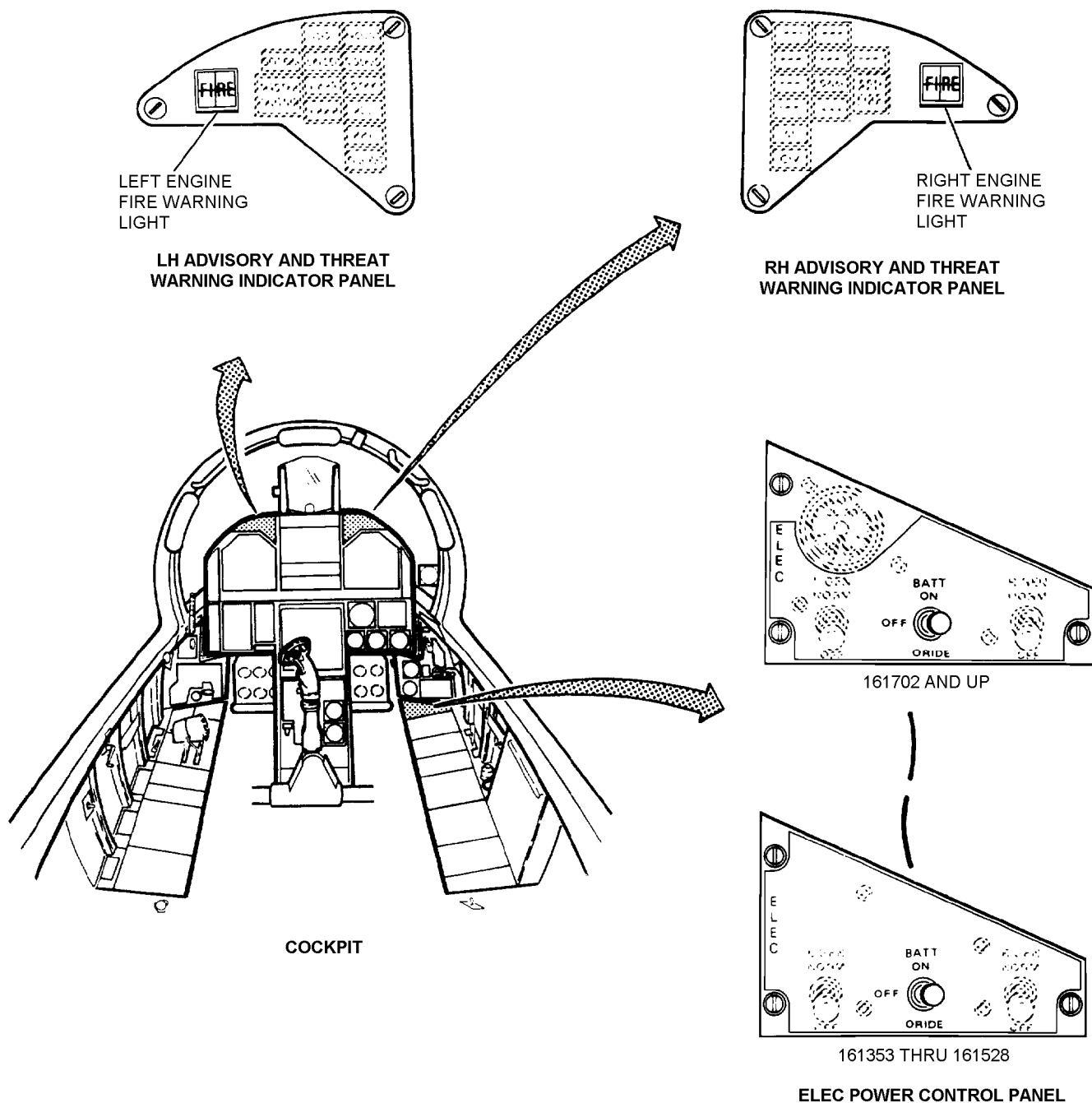


Figure 2. Engine Motive Flow Check Valve Leak Test (Sheet 1)

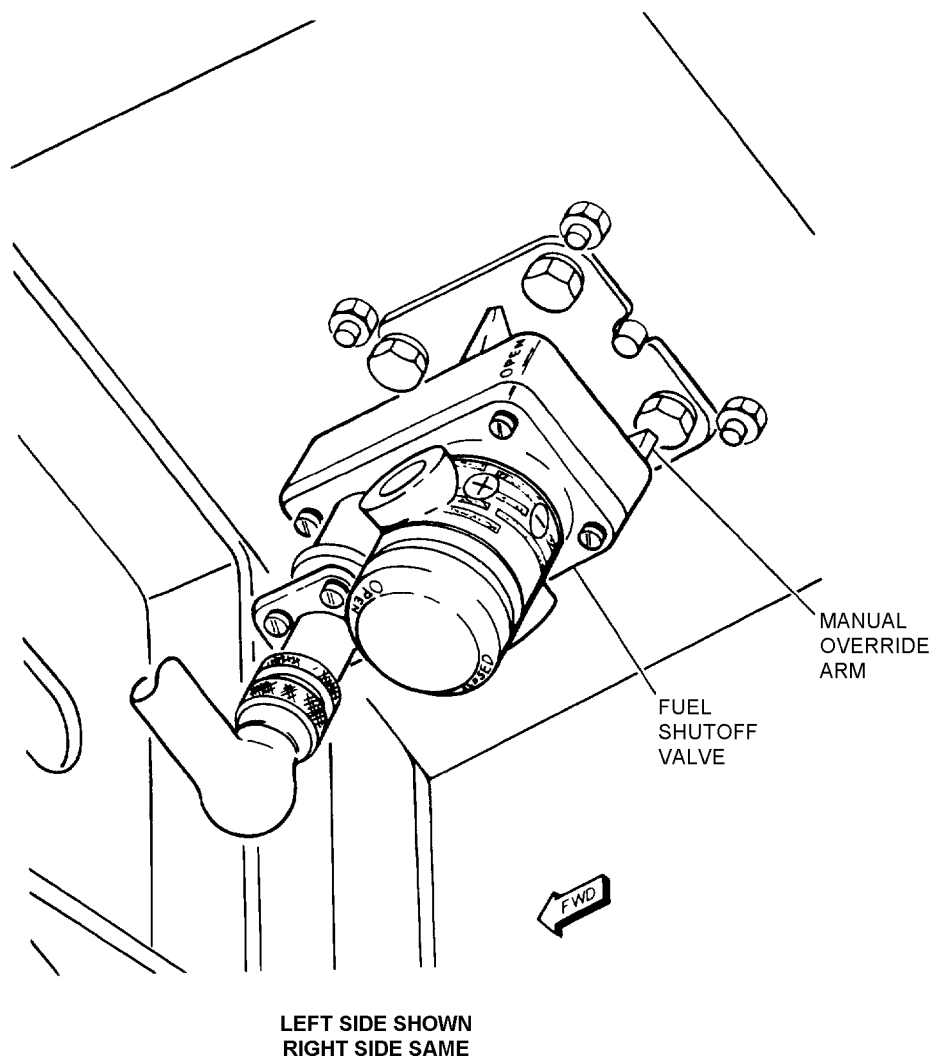
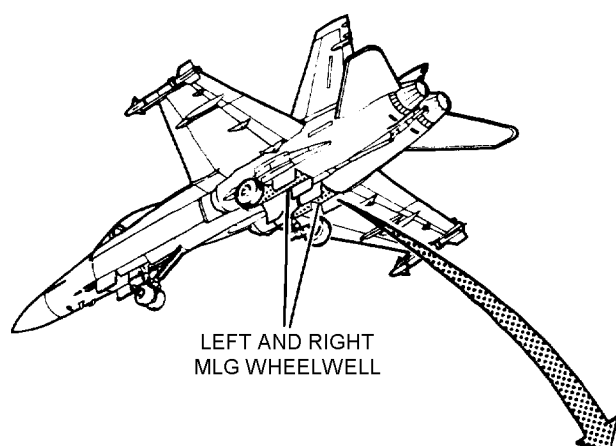
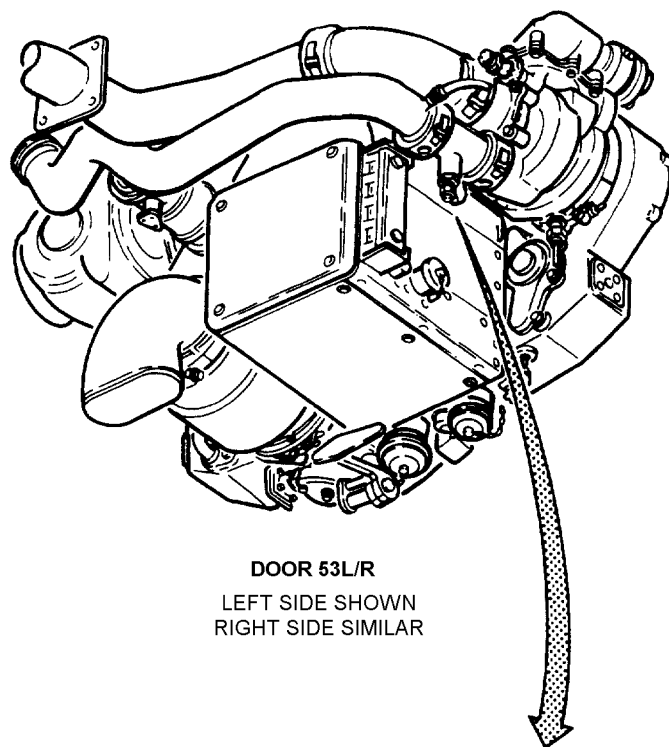


Figure 2. Engine Motive Flow Check Valve Leak Test (Sheet 2)



DOOR 53L/R
LEFT SIDE SHOWN
RIGHT SIDE SIMILAR

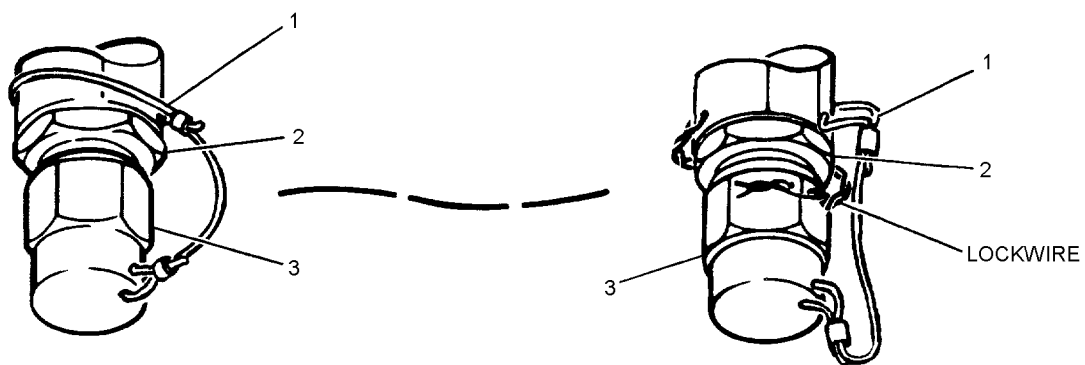


Figure 2. Engine Motive Flow Check Valve Leak Test (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		ENGINE MOTIVE FLOW CHECK VALVE									
		LEAK TEST									
1	9M59-2-140P +	.							1		MGOZZ
	9M59-2-400P ++	.							1		MGOZZ
	51893	.							2		PAOZZ
		(MCDONNELL SPEC 9M306-6)									
		(USE WITH INDEX 2)									
2	AN815-10J	.							1		PAOZZ
	M25988/1-910	.							1		PAOZZ
3	74A587050-2001 ¢	.							1		XBOZZ
		(76301)									
	AN929A10J	.							1	*	PAOZZ
		CAP (INCLUDES AN818L10J NUT)									

¢ MADE FROM AN929A110J.

ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

+ USE WITH 74A586991-1005 TUBE.

++ USE WITH 74A586991-1007 &
74A587010-1001 TUBES.

Figure 2. Engine Motive Flow Check Valve Leak Test (Sheet 4)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
WING DAMAGE FUEL SHUTOFF VALVE (5L-R110)
INTERNAL FUEL TRANSFER SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Forward Access Cover	WP007 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer and Engine Fuel Supply System Test	WP012 00
Line Maintenance Procedures	A1-F18AC-LMM-000
Wiring Repair with Parts Data General Wiring Repair Procedures	A1-F18AC-WRM-000

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 83	-

Support Equipment Required

Nomenclature	Part Number or Type Designation
--------------	------------------------------------

Torque Wrench, 0 to 120 Inch-Pounds	-
---	---

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC32 (CAGE 96906)
Packing	MS29513-132
Packing (4)	MS29513-214
Packing (2)	MS29513-230
Petrolatum, Technical	VV-P-236 (CAGE 81348)
Tape, Lacing	MIL-T-43435 Type 2, Size 3, Finish C (CAGE 81349)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. On 163146 AND UP, remove bolt (6, figure 1) with washer and disconnect electrical lead (5).
- c. Disconnect connector (7, detail B).
- d. Remove ring (8), disconnect connector (11), and remove packing (9).
- e. Disconnect wires from pins 11, 12, and 13 of connector (11, detail B and C) (A1-F18AC-WRM-000).
- f. Secure 7 feet of lacing tape to wires removed from connector (11). Secure opposite end of lacing tape to structure.
- g. Remove coupling (4, detail A), tube (2) and packings (3), and attaching parts.
- h. Disconnect tube (10, detail D) from valve (18).
- i. Remove bolts (19) and washers from valve (18).

- j. Remove couplings (17) and packings (16).



To prevent damage to wires, use caution when pulling wires through tube.

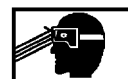
- k. Carefully pull wires through tube (10) until lacing tape is visible.

- l. Remove lacing tape from wires and remove valve (18) from tank.

- m. Secure lacing tape on end of tube (10).

2. INSTALLATION.

- a. Do a general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate all packings with petrolatum.

- c. Prepare mating surfaces of valve (18, figure 1, detail D) and support (23) for electrical bonding (A1-F18AC-LMM-000).

- d. Secure valve (18) wires to lacing tape at tube (10).



To prevent damage to wires use caution when pulling wire through tube.

- e. Manually support valve (18) and pull lacing tape and wires through dorsal deck.

- f. Install packings (16) and couplings (17).

- g. Install bolts (19) and washers on valve (18).

- h. Connect tube (10) to valve (18). Torque tube (10) to 80 inch-pounds. (QA)

- i. Install tube (2, detail A), coupling (4), packings (3), and attaching parts.

j. Connect WHT or GRN C wire to pin 11 of connector (11, detail B) (A1-F18AC-WRM-000).

k. Connect WHT/BLK or GRN-B wire to pin 12 of connector (11) (A1-F18AC-WRM-000).

l. Connect WHT/RED or GRN+A wire to pin 13 of connector (11) (A1-F18AC-WRM-000).

m. Install packing (9), position connector (11) in structure and install ring (8). Make sure jamnut is safetied with lockwire.

n. On 163146 AND UP, connect electrical lead (5) with bolt (6) and washer.

o. Install connector (7, detail B).

p. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)

q. Install no. 4 fuel tank forward access cover (WP007 00).

r. Do an internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

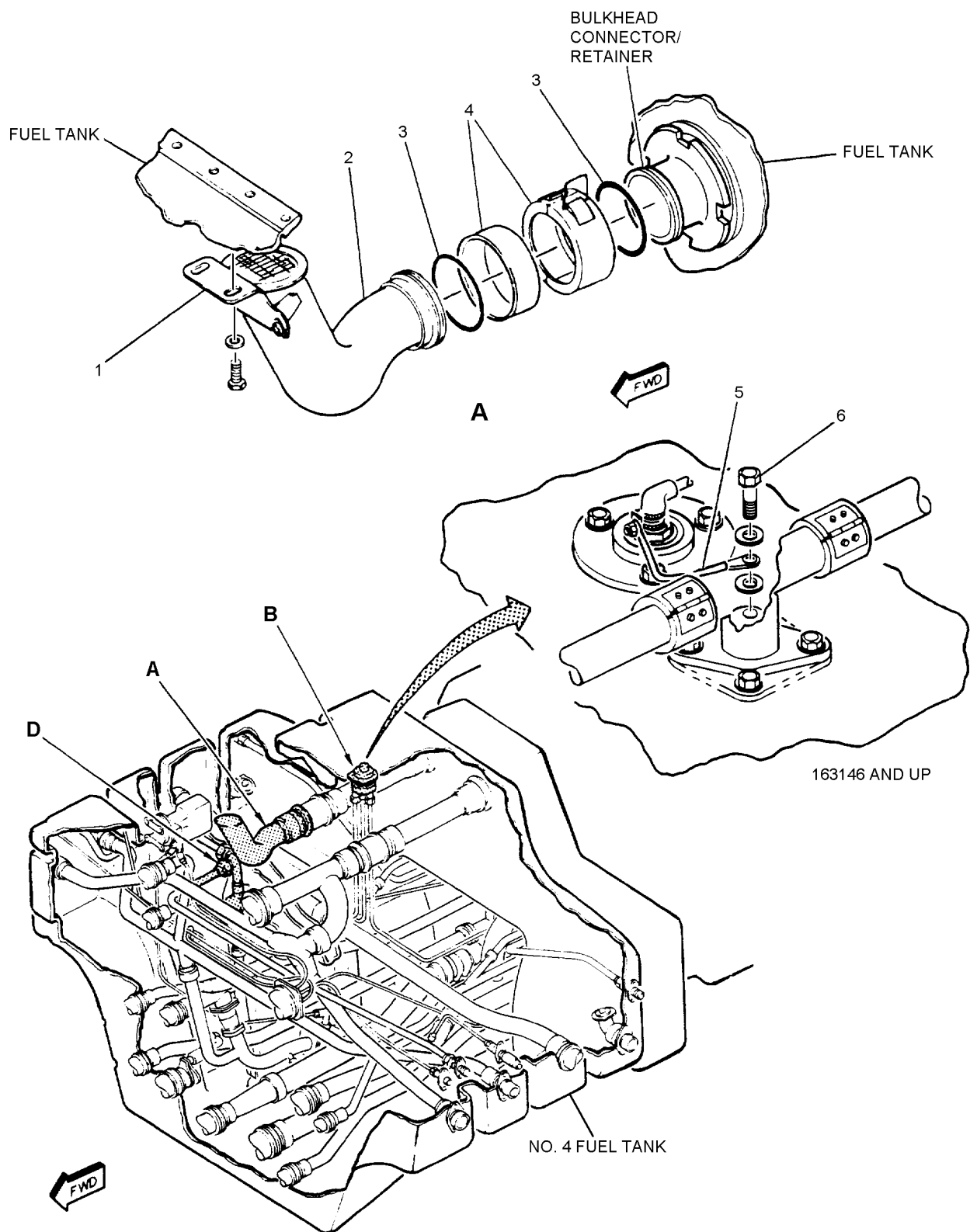


Figure 1. Wing Damage Fuel Shutoff Valve (5L-R110) (Sheet 1)

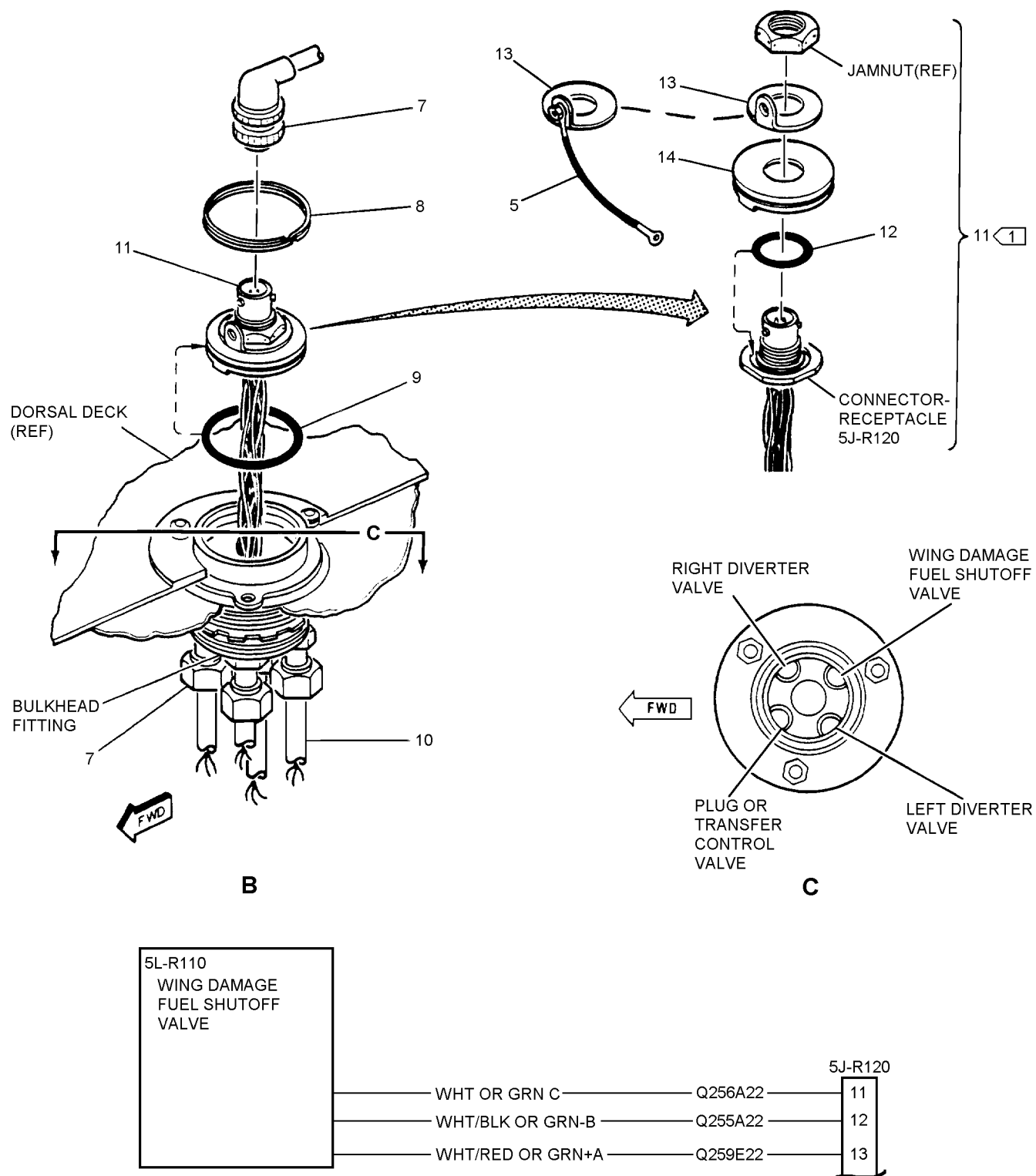


Figure 1. Wing Damage Fuel Shutoff Valve (5L-R110) (Sheet 2)

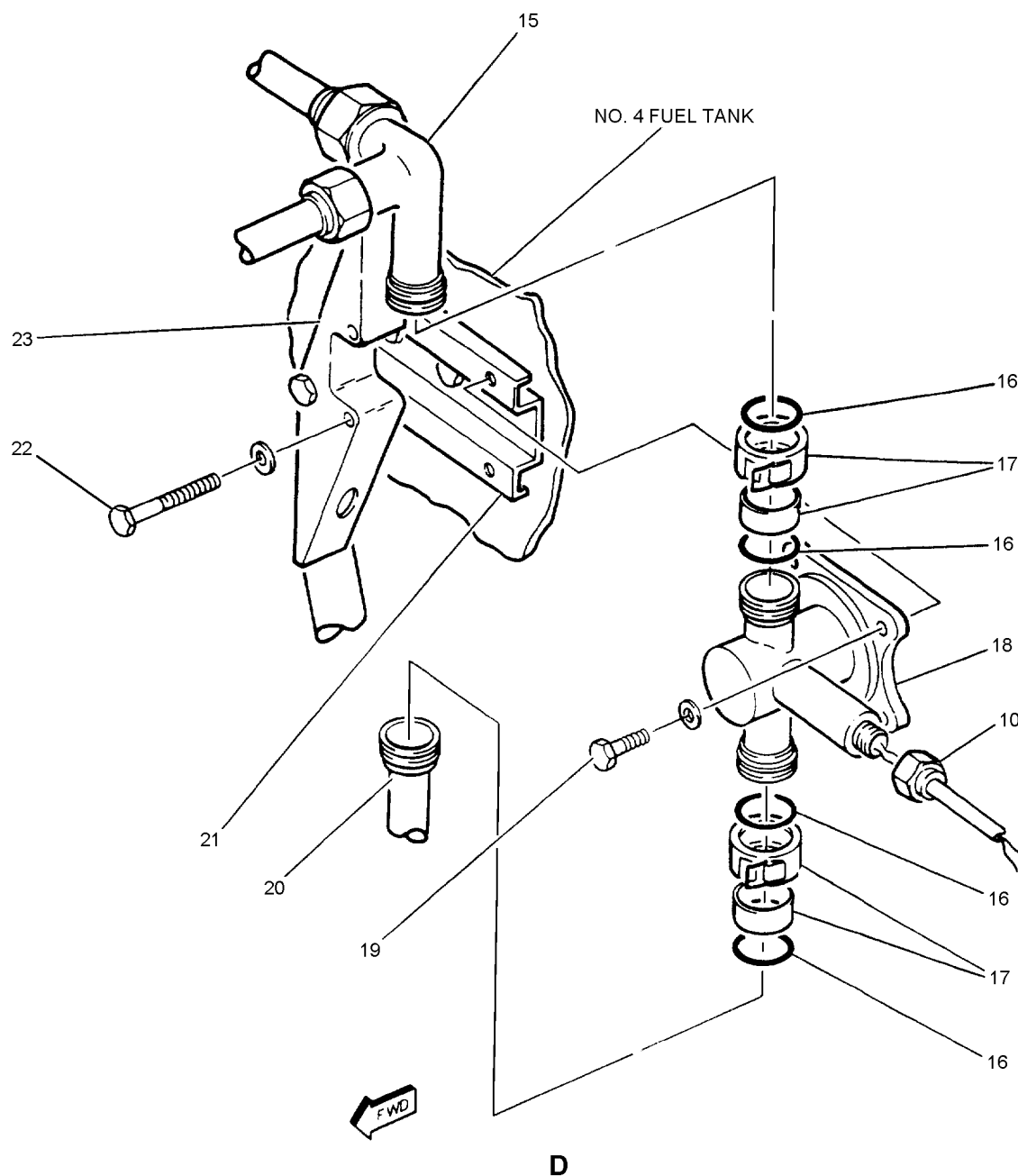


Figure 1. Wing Damage Fuel Shutoff Valve (5L-R110) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		WING DAMAGE FUEL SHUTOFF VALVE									
		(5L-R110)									
1	74A586429-1095	.	BRACKET (76301) (SUPERSEDES	.....					1		XBOOO
			74A586429-1015)								
	NAS674V1	.	BOLT (AP)						2		PAOZZ
	AN960JD416L	.	WASHER (AP)						2		PAOZZ
2	74A586462-1003	.	TUBE ASSEMBLY, METAL - CLIMB VENT	.....					1		XBOZZ
			(76301) (SUPERSEDES 74A586462-1001)								
	NAS673V2	.	BOLT (AP)						2		PAOZZ
	AN960JD10L	.	WASHER (AP)						2		PAOZZ
3	MS29513-230	.	PACKING						2		PAOZZ
4	W901K40DE	.	COUPLING, CLAMP, GROOVED (79326)	.....					1		PAOZZ
			(MCDONNELL SPEC 7M765-40D)								
			(INCLUDES SLEEVE)								
	14J12-40A	.	COUPLING, CLAMP, GROOVED (24984)	.....					1		PAOZZ
			(MCDONNELL SPEC 7M765-40D)								
			(INCLUDES SLEEVE)								
	W901F40DE	.	COUPLING, CLAMP, GROOVED (79326)	.....					1	*	PAOZZ
			(MCDONNELL SPEC 7M550-40D)								
			(INCLUDES SLEEVE)								
5	MS25083-2BC5	.	LEAD ELECTRICAL						1	B	PAOZZ
	NAS673V2	.	BOLT (AP)						1		PAOZZ
	AN960JD10L	.	WASHER (AP)						1		PAOZZ
	NAS1291C3M	.	NUT (AP)						1		PAOZZ
6	NAS674V5	.	BOLT						1	B	PAOZZ
	AN960JD416L	.	WASHER (USE WITH INDEX 6)	.....					1		PAOZZ
	AN960JD416	.	WASHER (USE WITH INDEX 6)	.....					1		PAOZZ
7	MS27467T11B35S	.	CONNECTOR, PLUG (5P-R120)	.....					1		PAOZZ
8	RRT 200 SP M9	.	RING, RETAINING (80856) (MCDONNELL	.....					1		PAOZZ
			SPEC 9M188C200)								
9	MS29513-132	.	PACKING						1		PAOZZ
10	74A586870-1007	.	TUBE ASSEMBLY, METAL - ELECT	.....					1		MGOZZ
			CONDUIT, SOLENOID VALVE (76301)								
			(SUPERSEDES 74A586870-1001)								
11	KJL7YC103451-3	.	CONNECTOR, RECEPTACLE (71468)	.....					1	*	PAOZZ
			(MCDONNELL SPEC 5M1701-11D35PN)								
			(INCLUDES NUT AND PACKING) (5J-R120)								
	92344-01	.	SEE ABOVE (14283)						1	*	PAOZZ
12	M25988/1-022	.	PACKING (M25988-1-022) (NHPA	.....					1		PAOZZ
			5M1701-11D35PN)								
13	74A586429-2355	.	WASHER (76301) (SUPERSEDES	.....					1		XBOZZ
			74A586429-2123)								
14	74A586454-2005	.	HOLDER, ELECTRICAL CONNECTOR -	.....					1		PAOZZ
			FUEL SYSTEM (76301)								
15	74A586435-2001	.	ELBOW TUBE - SIDE OUTLET MOTIVE	.....					1		PAOZZ
			FLOW FUEL XFR, WING (76301)								
16	MS29513-214	.	PACKING						4		PAOZZ
17	W901K16DE	.	COUPLING, CLAMP, GROOVED (79326)	.....					2	*	PAOZZ
			(MCDONNELL SPEC 7M765-16D)								
			(INCLUDES SLEEVE)								

Figure 1. Wing Damage Fuel Shutoff Valve (5L-R110) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
	14J12-16A	.	COUPLING, CLAMP, GROOVED (24984)	.....					2	*	PAOZZ
			(MCDONNELL SPEC 7M765-16D)								
			(INCLUDES SLEEVE)								
18	0631270200-5	.	VALVE, SOLENOID - NORMALLY OPEN,	.....					1		PAOZZ
			SHUTOFF, FUEL (WING DAMAGE FUEL								
			SHUTOFF VALVE) (83533) (MCDONNELL								
			SPEC 74-580170-105) (5L-R110)								
19	NAS674V5	.	BOLT	.....					2		PAOZZ
	AN960JD416L	.	WASHER (USE WITH INDEX 19)	.....					2		PAOZZ
20	74A586434-1003	.	TUBE ASSEMBLY, METAL - MOTIVE	.....					1		PAOZZ
			FLOW, TRANS BOOST, TANK NO. 4								
			(76301) (REPLACES 74A586434-1001)								
	74A586434-1001	.	TUBE ASSEMBLY, METAL - MOTIVE FLOW,	.....					1	A	PAOZZ
			TRANS BOOST, TANK NO. 4 (76301)								
			(USE UNTIL EXHAUSTED)								
21	74A586429-1051	.	BRACKET ASSEMBLY (76301)	.....					1		XBOOO
	MS21062L4	.	NUT, PLATE (USE WITH INDEX 21)	.....					5		PAOZZ
	MS20426AD3 #	.	RIVET (AP)	.....					2		-
22	NAS674V27	.	BOLT	.....					2		PAOZZ
	AN960JD416L	.	WASHER (USE WITH INDEX 22)	.....					2		PAOZZ
23	74A586654-1001	.	SUPPORT ASSY, FUEL LINE RH Y470.50	.....					1		XBOGG
			(76301)								

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

CODE	USABLE ON	MODEL
A	161353 THRU 161519	F/A-18A/B
B	163146 AND UP	F/A-18/AB

Figure 1. Wing Damage Fuel Shutoff Valve (5L-R110) (Sheet 5)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

WING MOTIVE FLOW PILOT FLOAT VALVE (5VAU528 OR 5VAV529)

INTERNAL FUEL TRANSFER SYSTEM

Reference Material

Fuel System	A1-F18AC-460-200
Internal Fuel Transfer and Engine Fuel Supply System	WP012 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captain Manual	A1-F18AC-PCM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

NOTE

Nomenclature	Part Number or Type Designation	This procedure is typical for left or right wing motive flow pilot float valve.
External Electrical Power Source	-	

1. REMOVAL.

a. Defuel wing (A1-F18AC-PCM-000) per substeps below:

(1) Do or observe defueling precautions (A1-F18AC-PCM-000).

(2) Apply external electrical power (A1-F18AC-LMM-000).

(3) On cockpit FUEL QTY indicator (figure 1), set FUEL QTY selector to INTER WING.

Materials Required

Nomenclature	Specification or Part Number
Packing (1)	MS29513-111
Petrolatum, Technical	VV-P-236 (CAGE 81348)

(4) Monitor FUEL QTY indicator.

(5) Defuel aircraft (A1-F18AC-PCM-000) until LEFT and RIGHT counters on FUEL QTY indicator display 0000.

(6) Remove external electrical power (A1-F18AC-LMM-000).

b. Make sure hydraulic and electrical power are not applied (A1-F18AC-LMM-000).

c. Tag aircraft external power receptacle with an applicable warning to indicate external power is not to be applied to the aircraft.

d. Drain residual fuel (A1-F18AC-PCM-000).

e. Remove door 106 (A1-F18AC-LMM-010).

f. Remove valve (1).

g. Remove packing (2) from step of valve (1).

h. To prevent contamination, position door 106 over opening.

2. INSTALLATION.



Petrolatum

1

a. Lubricate new packing (2, figure 1) with petrolatum.

b. Install packing (2) on step of valve (1).

c. Install valve (1) by positioning step of valve in tube assembly.

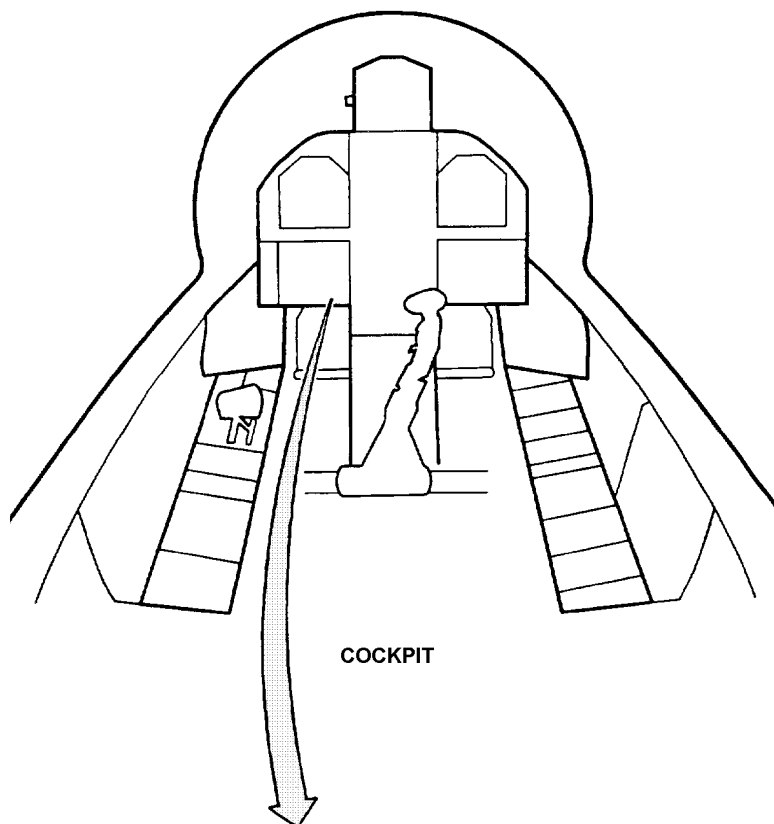
d. Inspect for and remove any foreign objects, then install door 106 (A1-F18AC-LMM-010). (QA)

e. Remove no power tag from external power receptacle.

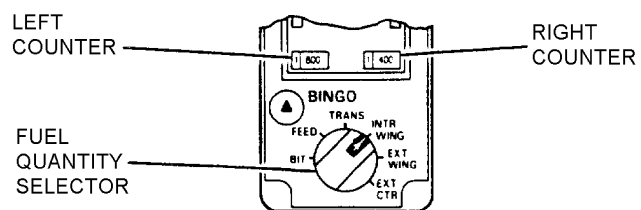
f. Do an internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.



COCKPIT



FUEL QUANTITY INDICATOR

Figure 1. Wing Motive Flow Pilot Float Valve (5VAU528 or 5VAV529) (Sheet 1)

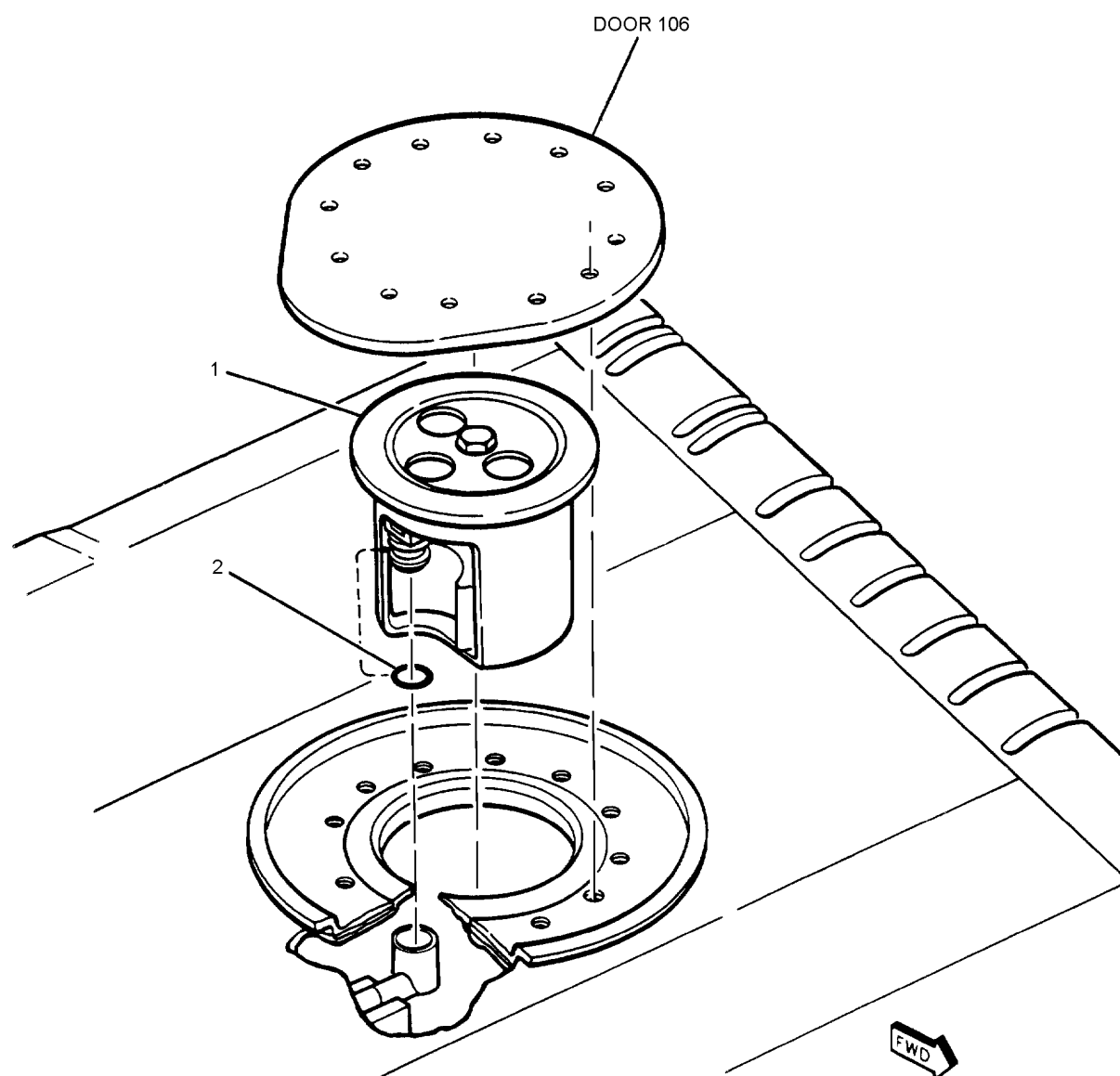


Figure 1. Wing Motive Flow Pilot Float Valve (5VAU528 or 5VAV529) (Sheet 2)

1230001B

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		WING MOTIVE FLOW PILOT FLOAT VALVE									
		(5VAU528 OR 5VAV529)									
1	2760109-102	.							1		PAOZZ
		VALVE, FLOAT, AIRCRAFT FUEL TANK -									
		PILOT, MOTIVE FLOW (LH OR RH)									
		(WING MOTIVE FLOW PILOT FLOAT									
		VALVE) (92003) (MCDONNELL SPEC									
		74-580065-203) (5VAU528 OR 5VAV529)									
2	MS29513-111	.							1		PAOZZ
		PACKING									

Figure 1. Wing Motive Flow Pilot Float Valve (5VAU528 or 5VAV529) (Sheet 3)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
WING TRANSFER JET EJECTOR (5BAU548 OR 5BAV549)
AND
MOTIVE FLOW SHUTOFF VALVE (5VAU543 OR 5VAV544)
AND
WING TRANSFER JET EJECTOR STRAINER (5FAU685 OR 5FAV686)
INTERNAL FUEL TRANSFER SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-200
Wing Fuel Transfer Test	WP018 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captain Manual	A1-F18AC-PCM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

Nomenclature	Part Number or Type Designation
---------------------	--

External Electrical Power Source	-
----------------------------------	---

Materials Required

Nomenclature	Specification or Part Number
---------------------	-------------------------------------

Aluminum Oxide Paper, 240 - 300 Grit	-
Cheesecloth	CCC-C-440, Type 1, Class 1 (CAGE 81348)
Corrosion Resistant	KIT14-2 (CAGE 99442)
Packing	MS29512-06
Packing (2)	MS29513-117
Packing	MS29513-122
Packing	MS29513-326
Petrolatum, Technical	VV-P-236 (CAGE 81348)
■ Retainer	MS28773-06

NOTE

This procedure is typical for left or right wing transfer jet ejector motive flow shutoff valve and strainer.

1. REMOVAL.

a. Defuel wing (A1-F18AC-PCM-000) per substeps below:

(1) Do or observe defueling precautions (A1-F18AC-PCM-000).

(2) Apply external electrical power (A1-F18AC-LMM-000).

(3) On cockpit FUEL QTY indicator, set FUEL QTY selector to INTER WING (figure 1).

(4) Monitor FUEL QTY indicator.

(5) Defuel aircraft (A1-F18AC-PCM-000) until LEFT and RIGHT counters on FUEL QTY indicator display 0000.

(6) Remove external electrical power (A1-F18AC-LMM-000).

b. Make sure hydraulic and electrical power are not applied (A1-F18AC-LMM-000).

c. Tag aircraft external power receptacle with an applicable warning to indicate external power is not to be applied to the aircraft.

d. Drain wing residual fuel (A1-F18AC-PCM-000).

e. Remove door 77L or 77R (A1-F18AC-LMM-010).

f. Do fuel tank maintenance precautions (WP013 00).

g. Remove foam (1 and 2, figure 1).

h. Remove clamps (4 and 5) bolt (6) and nut (3).

i. Remove coupling (14) (WP013 00) and disconnect tube from elbow (12).

j. Remove bolts (8) and disconnect valve (7) from ejector (17).

k. Remove bolts (15 and 20) and ejector (17).

l. Remove strainer (22, detail A), packing (21) and remove any foreign objects from strainer.

m. Remove packings (13 and 16, figure 1).

n. Remove elbow (12), nut (11), retainer (10), and packing (9). ■

o. Remove electrical lead (18), clamp (19) and attaching parts.

p. To prevent contamination, cover door opening 77.

2. INSTALLATION.

a. Make sure hydraulic and electrical power are not applied (A1-F18AC-LMM-000).

b. Make sure jet ejector (17, figure 1) is not clogged or damaged.

c. If installing new ejector (17), do substeps below:

(1) Remove anodized coating from ejector (17) with aluminum oxide paper where clamp (19) is to be attached (see figure 1).

(2) Remove any grit from surface with clean, dry cheesecloth.



Corrosion Resistant

4

(3) Apply corrosion resistant material to sanded area and allow solution to remain on area 5 to 8 minutes.

(4) Rinse treated area with cold water and allow to air dry.



Petrolatum

1

d. Lubricate new packings (9, 13 and 16) with petrolatum.

e. Install nut (11), retainer (10), packing (9), and elbow (12), handtighten nut (11).

f. Prepare mating surfaces of electrical lead (18), ejector (17), structure and clamp (19) for electrical bond (A1-F18AC-LMM-000).

g. Install electrical lead (18) and clamp (19) with attaching parts on ejector (17). Make sure clamp (19) is attached to ejector (17) where anodized coating has been removed.

h. Install packings (13 and 16).

i. Install packing (21, detail A) and strainer (22).

j. Prepare mating surfaces of ejector inlet tube and ejector (17, figure 1) for electrical bonding (A1-F18AC-LMM-000).

k. Place electrical lead (18) under head of bolt (15) and install valve (7), ejector (17) and bolts (15 and 20).

l. Attach valve (7) to ejector (17) with bolts (8).

m. Connect tube to elbow (12).

n. Inspect and install coupling (14) (WP013 00).

o. Tighten nut (11).

p. Install clamps (4 and 5), bolt (6) and nut (3).

q. Install foam (1 and 2).

r. Install door 77L or 77R (A1-F18AC-LMM-010).

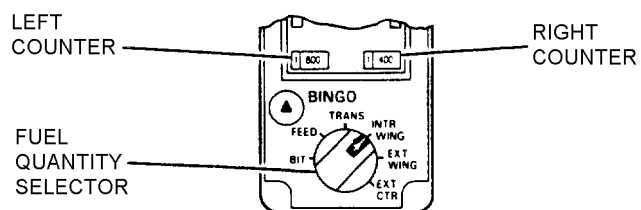
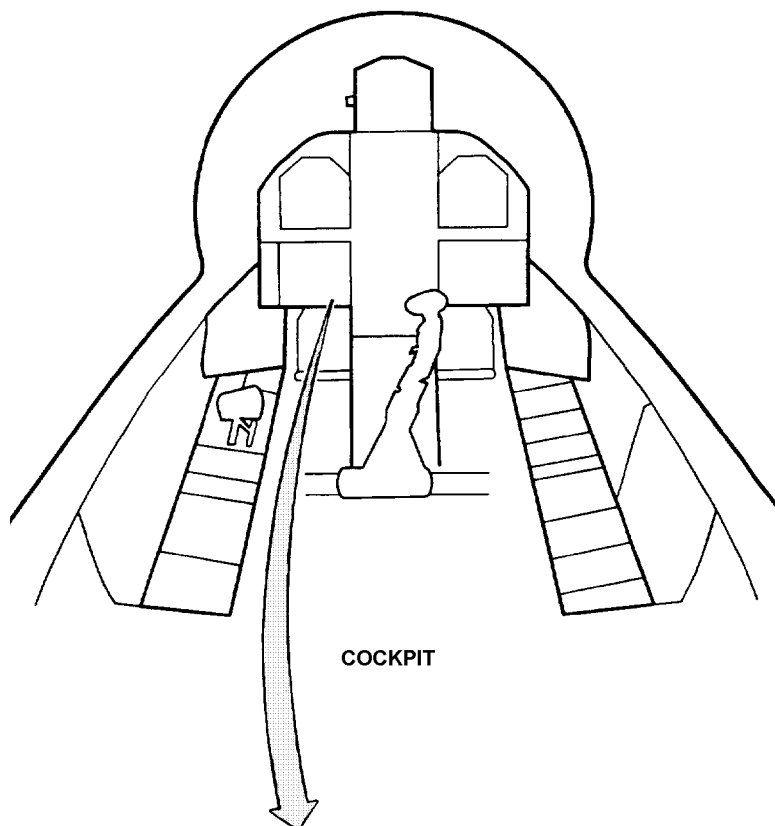
s. Connect utility and emergency battery connectors (WP013 00).

t. Remove no power tag from external power receptacle.

u. Do wing tank fuel transfer test (A1-F18AC-460-200, WP018 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.



FUEL QUANTITY INDICATOR

Figure 1. Wing Transfer Jet Ejector (5BAU548 or 5BAV549) and Motive Flow Shutoff Valve (5VAU543 or 5VAV544) and Wing Transfer Jet Ejector Strainer (5FAU685 or 5FAV686) (Sheet 1)

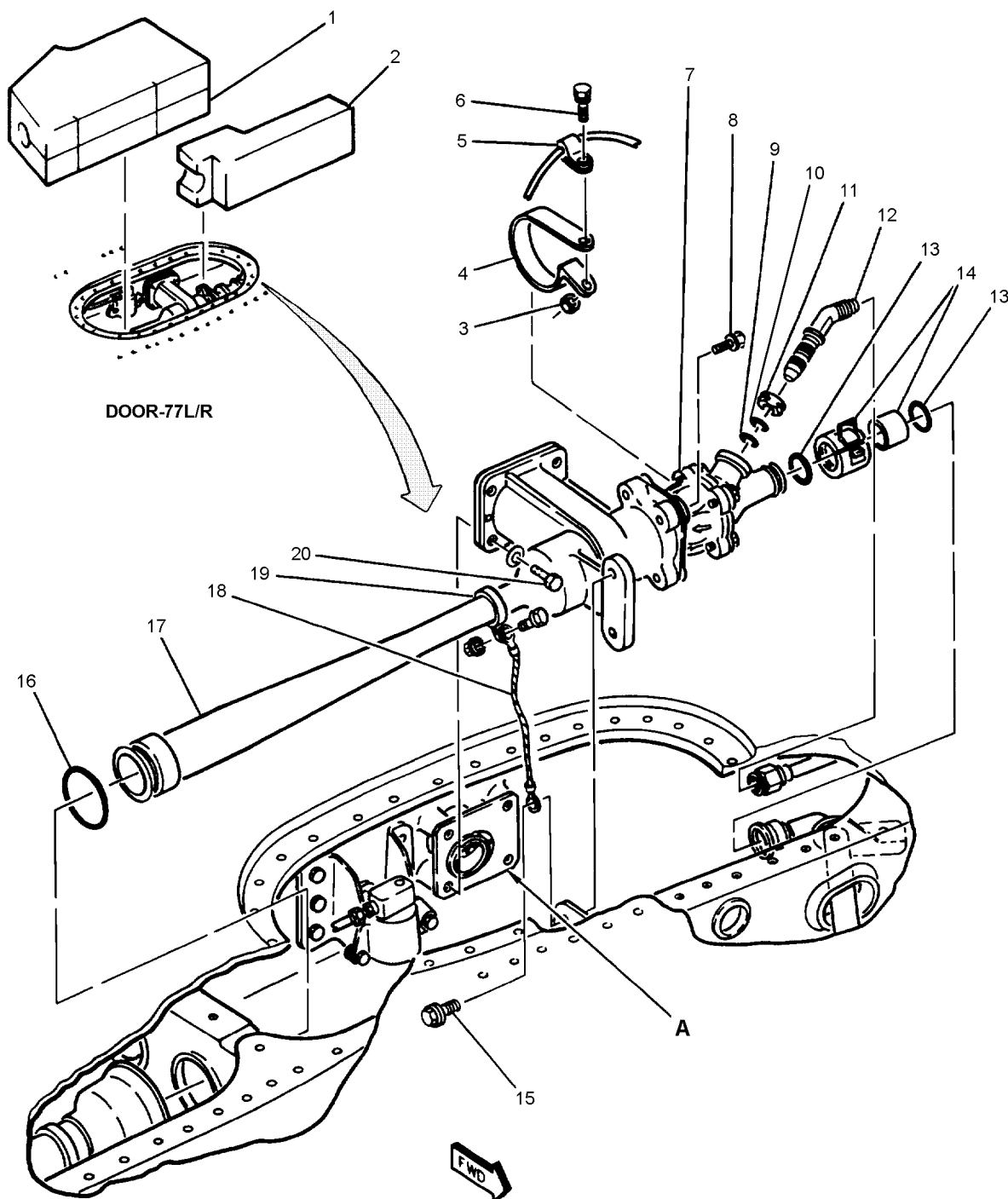


Figure 1. Wing Transfer Jet Ejector (5BAU548 or 5BAV549) and Motive Flow Shutoff Valve (5VAU543 or 5VAV544) and Wing Transfer Jet Ejector Strainer (5FAU685 or 5FAV686) (Sheet 2)

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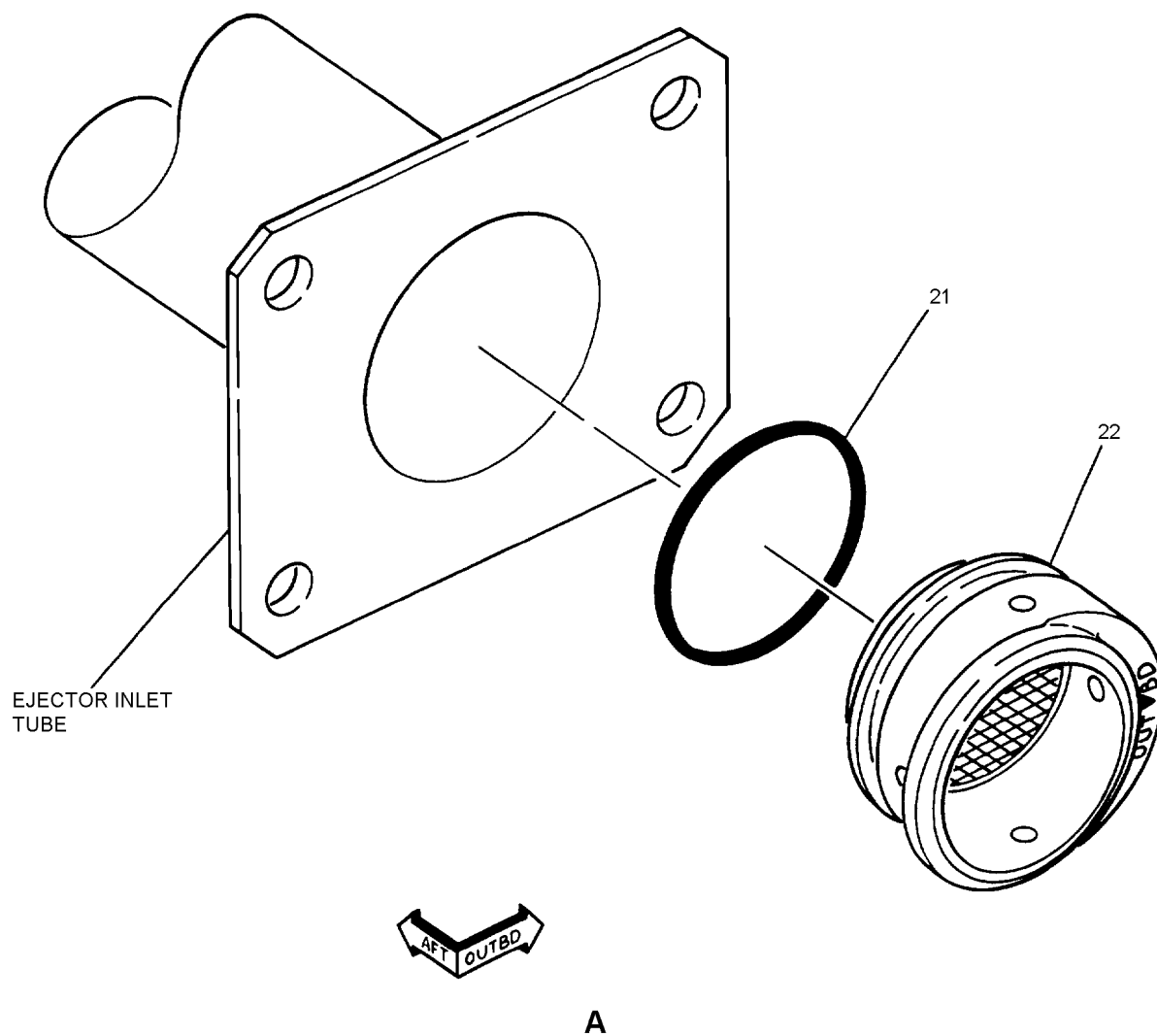


Figure 1. Wing Transfer Jet Ejector (5BAU548 or 5BAV549) and Motive Flow Shutoff Valve (5VAU543 or 5VAV544) and Wing Transfer Jet Ejector Strainer (5FAU685 or 5FAV686) (Sheet 3)

1240001C

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		WING TRANSFER JET EJECTOR (5BAU548 OR 5BAV549) AND MOTIVE FLOW SHUTOFF VALVE (5VAU543 OR 5VAV544) AND WING TRANSFER JET EJECTOR STRAINER (5FAU685 OR 5FAV686)									
1	74A584001-2039	.	FOAM, EXPLOSION SUPPRESSION,						1		MDOZZ
			WING, INNER (76301) (LEFT WING)								
	74A584001-2040	.	FOAM, EXPLOSION SUPPRESSION,						1		MDOZZ
			WING, INNER (76301) (RIGHT WING)								
2	74A584001-2037	.	FOAM, EXPLOSION SUPPRESSION,						1		MDOZZ
			WING, INNER (76301) (LEFT WING)								
	74A584001-2037	.	FOAM, EXPLOSION SUPPRESSION						1		MDOZZ
			WING, INNER (76301) (RIGHT WING)								
3	NAS1291C3M	.	NUT						1		PAOZZ
4	MS25281-R30	.	CLAMP						1		PAOZZ
5	M525281-2	.	CLAMP						1		PAOZZ
6	VDP0002-5	.	BOLT, ASSEMBLED WASHER (06710)						1	*	PAOZZ
			(MCDONNELL SPEC 3M881V3-5)								
	111026-3-5	.	BOLT, ASSEMBLED WASHER (80539)						1	*	PAOZZ
			(MCDONNELL SPEC 3M881V3-5)								
	T981-3-5	.	BOLT, ASSEMBLED WASHER (97928)						1	*	PAOZZ
			(MCDONNELL SPEC 3M881V3-5)								
	SC2670-3-5	.	BOLT, ASSEMBLED WASHER (06950)						1	*	PAOZZ
			(MCDONNELL SPEC 3M881V3-5)								
	D16175-10-5	.	BOLT, ASSEMBLED WASHER (08524)						1	*	PAOZZ
			(MCDONNELL SPEC 3M881V3-5)								
7	2760012-101	.	VALVE, STOP-CHECK - SHUTOFF,						1		PAOZZ
			MOTIVE FLOW, FUEL LH OR RH								
			(MOTIVE FLOW SHUTOFF VALVE)								
			(92003) (MCDONNELL SPEC								
			74-580065-201) (5VAU543 OR 5VAV544)								
8	VDP0001-4	.	BOLT, ASSEMBLED WASHER (AP) (06710)						4	*	PAOZZ
			(MCDONNELL SPEC 3M881V4-4)								
	111026-4-4	.	BOLT, ASSEMBLED WASHER (AP) (80539)						4	*	PAOZZ
			(MCDONNELL SPEC 3M881V4-4)								
	T981-4-4	.	BOLT, ASSEMBLED WASHER (AP) (97928)						4	*	PAOZZ
			(MCDONNELL SPEC 3M881V4-4)								
	SC2670-4-4	.	BOLT, ASSEMBLED WASHER (AP) (06950)						4	*	PAOZZ
			(MCDONNELL SPEC 3M881V4-4)								
	D16175-12-4	.	BOLT, ASSEMBLED WASHER (AP) (08524)						4	*	PAOZZ
			(MCDONNELL SPEC 3M881V4-4)								
9	MS29512-06	.	PACKING						1		PAOZZ
10	MS28773-06	.	RETAINER						1		PAOZZ
11	AN6289D6	.	NUT						1		PAOZZ
12	7M637BY-6D	.	ELBOW, TUBE (76301)						1		PAOZZ
13	MS29513-117	.	PACKING						2		PAOZZ
14	W901K12DE	.	COUPLING, CLAMP, GROOVED (79326)						1		PAOZZ
			(MCDONNELL SPEC 7M765-12D)								
			(INCLUDES SLEEVE)								
	14J12-12A	.	COUPLING, CLAMP, GROOVED (24984)						1		PAOZZ
			(MCDONNELL SPEC 7M765-12D)								
			(INCLUDES SLEEVE)								

Figure 1. Wing Transfer Jet Ejector (5BAU548 or 5BAV549) and Motive Flow Shutoff Valve (5VAU543 or 5VAV544) and Wing Transfer Jet Ejector Strainer (5FAU685 or 5FAV686) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USE ON CODE	SM&R CODE
		1 2 3 4 5 6 7			
	W901F12DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M7550-12D) (INCLUDES SLEEVE)	1	*	PAOZZ
15	VDP0001-2	. BOLT ASSEMBLED WASHER (06710) (MCDONNELL SPEC 3M881V4-2)	2	*	PAOZZ
	111026-4-2	. BOLT, ASSEMBLED WASHER (80539) (MCDONNELL SPEC 3M881V4-2)	2	*	PAOZZ
	T981-4-2	. BOLT, ASSEMBLED WASHER (97928) (MCDONNELL SPEC 3M881V4-2)	2	*	PAOZZ
	SC2670-4-2	. BOLT, ASSEMBLED WASHER (06950) (MCDONNELL SPEC 3M881V4-2)	2	*	PAOZZ
	D16175-12-2	. BOLT, ASSEMBLED WASHER (08524) (MCDONNELL SPEC 3M881V4-2)	2	*	PAOZZ
16	MS29513-326	. PACKING	1		PAOZZ
17	2760103-109	. EJECTOR, JET - WING FUEL TRANSFER (LH OR RH) (WING TRANSFER JET EJECTOR) (92003) (MCDONNELL SPEC 74-580112-111) (5BAU548 OR 5BAV549)	1		PAOZZ
	2760103-107	. SEE ABOVE (92003)	1	*	PAOZZ
	2760103-105	. SEE ABOVE (92003)	1	*	PAOZZ
18	MS25083-7BC5	. LEAD, ELECTRICAL	1		PAOZZ
19	AN735D12	. CLAMP	1		PAOZZ
	VDP0002-2	. BOLT, ASSEMBLED WASHER (AP) (06710) (MCDONNELL SPEC 3M881V3-2)	1	*	PAOZZ
	111026-3-2	. BOLT, ASSEMBLED WASHER (AP) (80539) (MCDONNELL SPEC 3M881V3-2)	1	*	PAOZZ
	T981-3-2	. BOLT, ASSEMBLED WASHER (AP) (97928) (MCDONNELL SPEC 3M881V3-2)	1	*	PAOZZ
	SC2670-3-2	. BOLT, ASSEMBLED WASHER (06950) (MCDONNELL SPEC 3M881V3-2) (AP)	1	*	PAOZZ
	D16175-10-2	. SEE ABOVE (08524)	1	*	PAOZZ
	NAS1291C3M	. NUT (AP)	1		PAOZZ
20	NAS674V30	. BOLT	4		PAOZZ
	AN960JD416	. WASHER (USE WITH INDEX 20)	4		PAOZZ
21	MS29513-122	. PACKING	1		PAOZZ
22	74A583167-1007 @	. STRAINER - FUEL SYSTEM, WING TANK (76301) (5FAU685 OR 5FAV686)	1		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

@ INSTALLED ON 161924 AND UP, MAY BE
INSTALLED ON 161353 THRU 161761

Figure 1. Wing Transfer Jet Ejector (5BAU548 or 5BAV549) and Motive Flow Shutoff Valve (5VAU543 or 5VAV544) and Wing Transfer Jet Ejector Strainer (5FAU685 or 5FAV686) (Sheet 5)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****FUEL TRANSFER TUBE AND STRAINER (5FAU681 OR 5FAV682)****INTERNAL TRANSFER SYSTEM****EFFECTIVITY: 161735 THRU 161924**

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Information	WP013 00
Fuel System Testing and Troubleshooting	A1-F18AC-460-200
Wing Fuel Transfer Test	WP018 00
Line Maintenance Access Doors	A1-F18AC-LMM-010

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 43	30 Sep 86	Replacement of 7M404/7M550 Fuel Couplings with Improved 7M765 Fuel Couplings (ECP MDA- F/A-18-00143)	1 Mar 86	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29513-218
Packings (3)	MS29513-220
Petrolatum, Technical	VV-P-236 (CAGE 81348)

NOTE

This procedure is typical for left or right tube and strainers.

1. REMOVAL.

- a. Remove door 41L/R (A1-F18AC-LMM-010).
- b. Observe applicable fuel tank maintenance precautions (WP013 00).
- c. Remove couplings (1 and 4, figure 1) and packings (2 and 6).
- d. Carefully unseat tube (3), drain residual fuel, and remove tube.
- e. Remove tube (5) and packing (6), inspect strainer for damage or foreign material.
- f. To prevent contamination, position door 41L/R over opening.

2. INSTALLATION.

- a. Observe applicable fuel tank maintenance precautions (WP013 00).



Petrolatum

1

- b. Lubricate new packings (2 and 6, figure 1) with petrolatum.
- c. Install packings (2 and 6) on tube assemblies (3 and 5).
- d. Install tube (5).
- e. Install tube (3) and couplings (1 and 4).
- f. Inspect and install couplings (1 and 4) if applicable, safety couplings (1 and 4) with lockwire per WP013 00. (QA)
- g. Inspect for and remove any foreign objects in work area, then install door 41L/R (A1-F18AC-LMM-010). (QA)
- h. Do a wing fuel transfer test (A1-F18AC-460-200, WP018 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

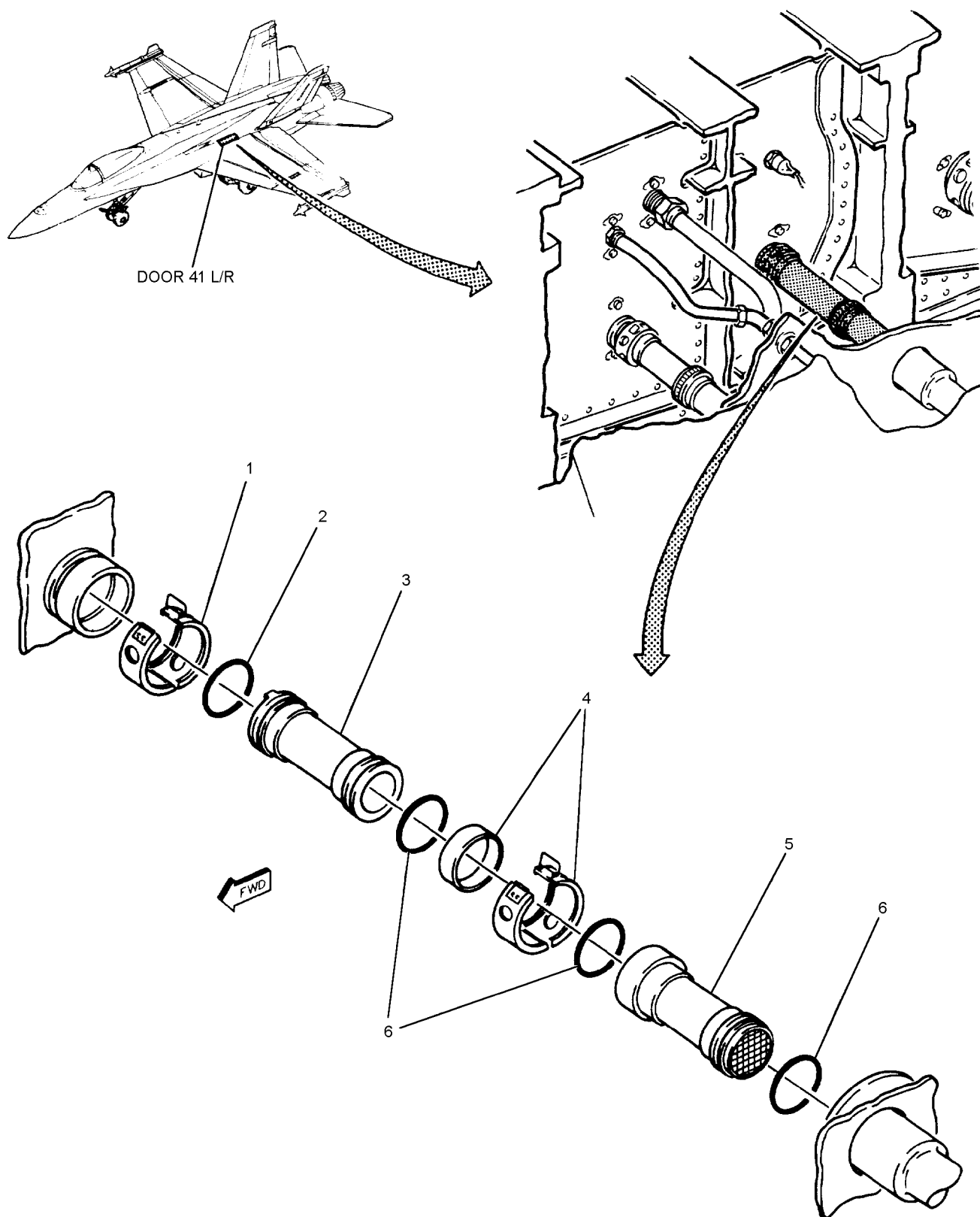


Figure 1. Fuel Transfer Tube and Strainer (5FAU681 or 5FAV682) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		FUEL TRANSFER TUBE AND STRAINER			
		(5FAU681 OR 5FAV682)			
1	W904K20DE	. COUPLING, CLAMP, GROOVED (HALF)	1	A	PAOZZ
		(79326) (MCDONNELL SPEC 7M765-20D1)			
	14C12-20A	. COUPLING, CLAMP, GROOVED (HALF)	1	A	PAOZZ
		(24984) (MCDONNELL SPEC 7M765-20D1)			
	W904F20DE	. COUPLING, CLAMP, GROOVED (HALF)	1	B*	PAOZZ
		(79326) (MCDONNELL SPEC 7M550-20D1)			
2	MS29513-218	. PACKING	1		PAOZZ
3	74A583007-1005	. ADAPTER - TUBE, FUEL TRANSFER, WING	1		XBOZZ
		TO FUSELAGE, INBD (76301)			
4	W901B20DE	. COUPLING, CLAMP, GROOVED (79326)	1	A	PAOZZ
		(MCDONNELL SPEC 7M765-20D)			
		(INCLUDES SLEEVE)			
	14J12-20A	. COUPLING, CLAMP, GROOVED (24984)	1	A	PAOZZ
		(MCDONNELL SPEC 7M765-20D)			
		(INCLUDES SLEEVE)			
	W901F20DE	. COUPLING, CLAMP, GROOVED (79326)	1	B*	PAOZZ
		(MCDONNELL SPEC 7M550-20D)			
		(INCLUDES SLEEVE)			
5	74A583015-1003	. ADAPTER - TUBE, FUEL TRANSFER,	1		XBOGG
		WING TO FUS, OUTBD (FUEL TRANSFER			
		TUBE AND STRAINER) (76301) (5FAU681			
		OR 5FAV682)			
6	MS29513-220	. PACKING	3		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161924; ALSO 161735 THRU 161761 AFTER F/A-18 AFC 043	F/A-18A/B
B	161735 THRU 161761 BEFORE F/A-18 AFC 043	F/A-18A/B

Figure 1. Fuel Transfer Tube and Strainer (5FAU681 or 5FAV682) (Sheet 2)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****NO. 4 FUEL TANK VENT SCAVENGE JET EJECTOR (5BAP559 OR 5BAR560)****NO. 4 FUEL TANK VENT SCAVENGE JET EJECTOR SUPPORT****INTERNAL FUEL TRANSFER SYSTEM****Reference Material**

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Aft Access Cover and Tank Entry Procedure	WP008 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Testing and Troubleshooting	A1-F18AC-460-200
Vent Tank Scavenge Test	WP021 00
Structural Hardware	NAVAIR 01-1A-8

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Disassembly	3
Inspection	2
Installation	2
Repair	3
Removal	2

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 83	-

1. NO. 4 FUEL TANK VENT SCAVENGE JET EJECTOR.**Support Equipment Required**

None

Materials Required

Nomenclature	Specification or Part Number
Packing (8)	MS29513-214
Packing (3)	M25988/1-312
Petrolatum, Technical	VV-P-236 (CAGE 81348)

2. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Do no. 4 fuel tank aft access cover and tank procedure removal (WP008 00).
- c. Disconnect tubes (5, figure 1, detail A).
- d. Remove couplings (3) and packings (2).
- e. Remove bolts (9), washers, and support assembly (7) with ejectors (4).
- f. Remove ejector (4) and attaching parts.

3. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings with petrolatum.
- c. Position ejector (4, figure 1, detail A) on support assembly (7) and install attaching parts.
- d. Install packings (8) in fuel tank fittings.
- e. Position support assembly (7) with ejectors (4) on fuel tank fittings and install bolts (9) and washers.

- f. Install packings (2).

- g. Install couplings (3).

- h. Connect tubes (5).

- i. Do no. 4 fuel tank aft access cover and tank entry procedure installation (WP008 00).

- j. Do vent tank scavenge test (A1-F18AC-460-200, WP021 00).

4. NO. 4 FUEL TANK VENT SCAVENGE JET EJECTOR SUPPORT.**Support Equipment Required**

None

Materials Required

None

5. REMOVAL.

- a. Remove no. 4 fuel tank vent scavenge jet ejector support assembly per paragraph 1.

6. INSTALLATION.

- a. Install no. 4 fuel tank vent scavenge jet ejector support assembly per paragraph 2.

7. INSPECTION.**Support Equipment Required**

None

Materials Required

None

a. Inspect support (6, figure 2) for conditions below:

- (1) Cracks.
- (2) Corrosion.
- (3) Sharp edges that could damage tank.
- (4) Shim (5) secure to support (3).

8. REPAIR.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Adhesive	EA934 (CAGE 33564)
Cheesecloth	301 (CAGE 97327)
Cloth, Nylon	PATTERN 30 (CAGE 92835)
Methyl Ethyl Ketone (MEK)	TT-M-261 (CAGE 81348)
Paper, Abrasive, 320 Grit	A-A-1047 Grit 320-9X11 (CAGE 58536)

9. DISASSEMBLY.

a. If support assembly (7, figure 1) is damaged, remove per paragraph 1.

b. If support (3, figure 2) is damaged, remove per substeps below:

- (1) Remove bolts (1) and attaching parts.
- (2) Remove shim (4) per NAVAIR 01-1A-8.

c. If bracket (2) is damaged, remove with bolts (1) and attaching parts.

d. If shim (4) is damaged, remove per NAVAIR 01-1A-8.

10. ASSEMBLY.

a. Install shim (4, figure 2) per NAVAIR 01-1A-8.

b. Install bracket (2) with bolts (1) and attaching parts.

c. Install support (3) per substeps below:

- (1) Install shim (4) per NAVAIR 01-1A-8.
- (2) Install bolts (1) and attaching parts.

d. If shim (5) is not-bonded to support (3), bond per substeps below:

NOTE

Do not touch surface to be bonded with bare hands after cleaning process begins. Fingerprint contamination can cause an unsatisfactory bond.

(1) Remove all residual adhesive and contaminants from mating surface of shim (5) and support (3) per substeps below:

a. Sand with 320 grit abrasive paper.



Methyl Ethyl Ketone

5

b. Wipe with cheesecloth dampened in MEK.

c. Wipe with clean, dry cheesecloth.



Adhesive

6

NOTE

The mixed adhesive will have a work life of approximately 40 minutes.

(2) Add 33 parts B to 100 parts A of adhesive EA934 by weight, and mix thoroughly.

(3) Apply a thin film of mixed adhesive to both mating surfaces.

NOTE

Apply nylon cloth to adhesive on one mating surface before components are pressed together to control bondline thickness.

(4) Trim to fit and apply nylon cloth to adhesive on mating surface of shim (5) or support (3).

(5) Install shim (5) on support (3) and apply pressure to ensure complete contact.

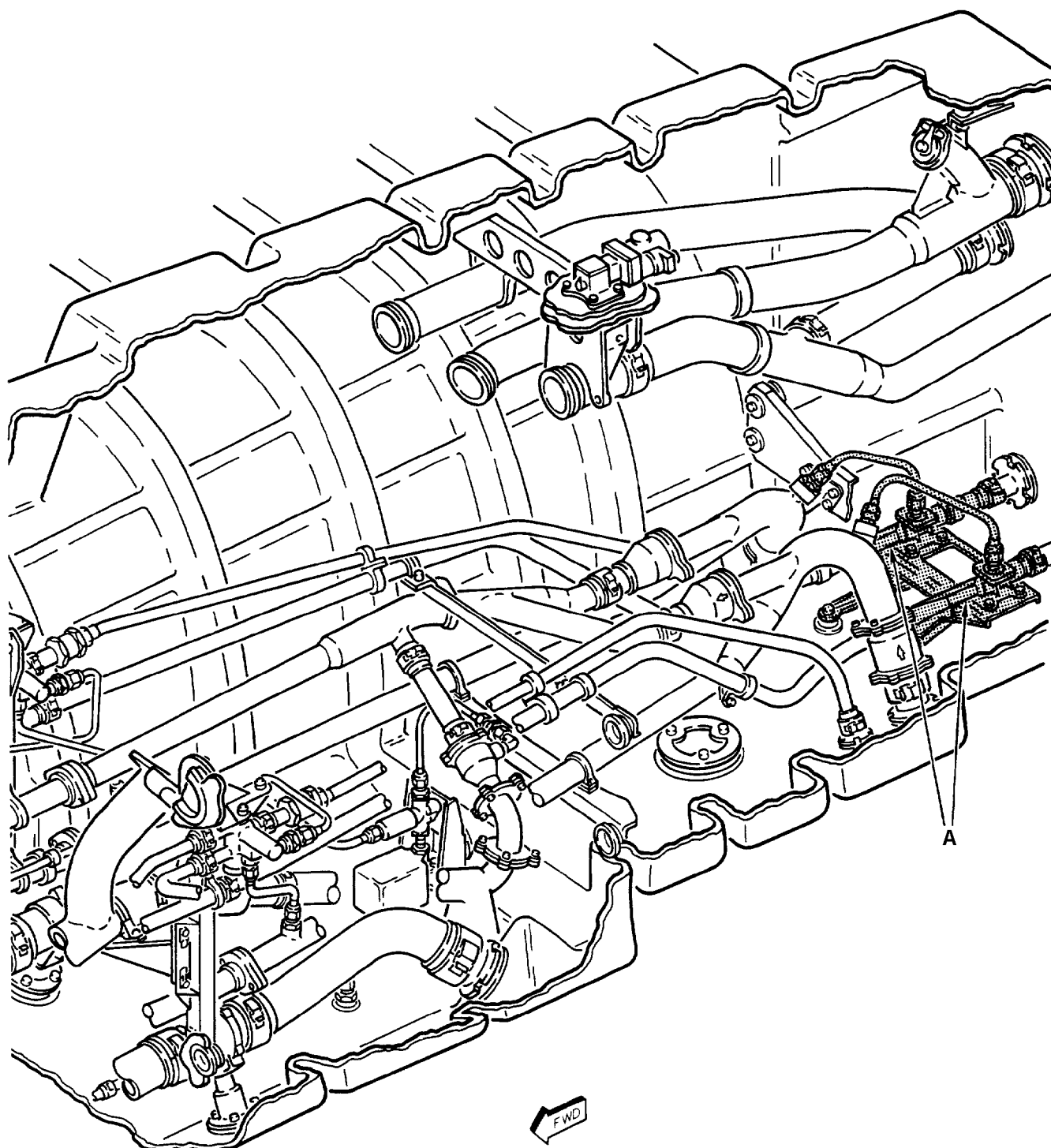
(6) Remove squeeze out with cheesecloth dampened in MEK.

(7) Allow assembly to cure for 5 days at room temperature or for 1 hour at $190^{\circ} \pm 10^{\circ} \text{ F}$

e. Install support assembly (7, figure 1) per paragraph 2.

11. ILLUSTRATED PARTS BREAKDOWN.

12. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.



1250001A

Figure 1. No. 4 Fuel Tank Vent Scavenge Jet Ejector (5BAP559 or 5BAR560) (Sheet 1)

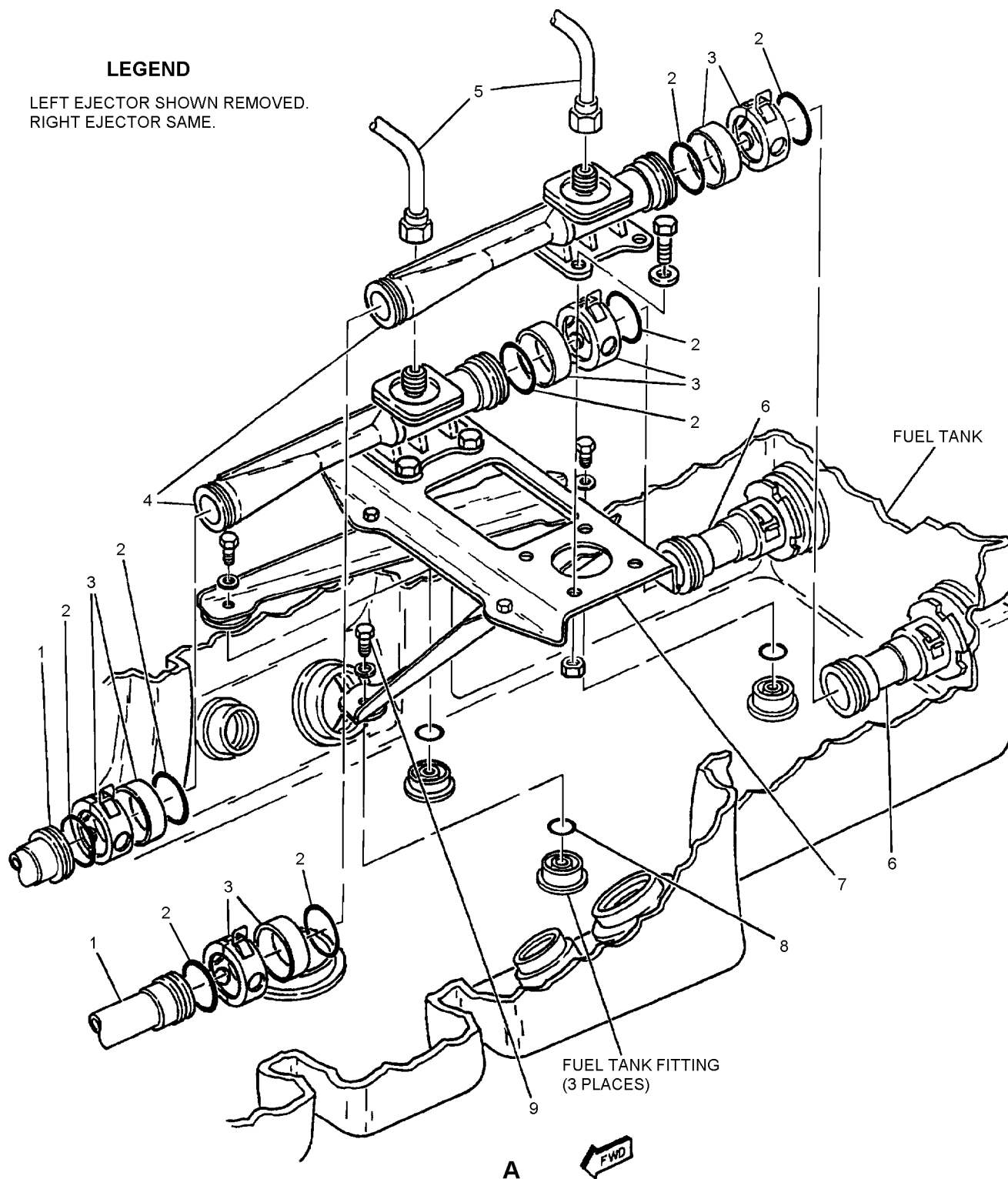


Figure 1. No. 4 Fuel Tank Vent Scavenge Jet Ejector (5BAP559 or 5BAR560) (Sheet 2)

1250001B

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 4 FUEL TANK VENT SCAVENGING JET			
		EJECTOR (5BAP559 OR 5BAR560)			
1	74A586496-1009	. TUBE ASSEMBLY, METAL - VENT TANK	1		XBOZZ
		SCAV LINE THRU TANK 4, LH (76301)			
		(LEFT SIDE) (SUPERSEDES 74A586496-1005			
		OR 74A586496-1007)			
	74A586860-1005	. TUBE ASSEMBLY, METAL - VENT TANK	1		XBOZZ
		SCAV LINE THRU TANK 4, RH (76301)			
		(RIGHT SIDE) (SUPERSEDES 74A586860-1003)			
2	MS29513-214	. PACKING	8		PAOZZ
3	W90IK16DE	. COUPLING, CLAMP, GROOVED (79326)	4	*	PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE)			
	14J12-16A	. COUPLING, CLAMP, GROOVED (24984)	4	*	PAOZZ
		(MCDONNELL SPEC 7M765-25D)			
		(INCLUDES SLEEVE)			
4	2760104-101	. EJECTOR, JET - VENT TANK SCAVENGE	1		PAOZZ
		(NO. 4 FUEL TANK VENT SCAVENGE			
		JET EJECTOR) (92003) (MCDONNELL			
		SPEC 74-580112-109) (5BAP559 OR 5BAR560)			
	NAS674V4	. BOLT (AP)	4		PAOZZ
	AN960JD416	. WASHER (AP)	4		PAOZZ
	NAS1291C4M	. NUT (AP)	4		PAOZZ
5	74A586851-1001	. TUBE ASSEMBLY, METAL - MOTIVE FLOW,	1	A	XBOZZ
		VENT TR SCAV PUMP, LH (76301)			
		(LEFT SIDE)			
	74A586851-1005	. TUBE ASSEMBLY, METAL - MOTIVE FLOW,	1	B	XBOZZ
		VENT TK SCAV PUMP, LH (76301)			
		(LEFT SIDE)			
	74A586851-1007	. TUBE ASSEMBLY, METAL - MOTIVE FLOW,	1	C	XBOZZ
		VENT TK SCAV PUMP, LH (76301)			
		(LEFT SIDE)			
	74A586872-1001	. TUBE ASSEMBLY, METAL - MOTIVE FLOW,	1	A	AGOGG
		VENT TK SCAV PUMP, RH (76301)			
		(RIGHT SIDE)			
	74A586872-1005	. TUBE ASSEMBLY, METAL - MOTIVE FLOW,	1	B	AGOGG
		VENT TK SCAV PUMP, RH (76301)			
		(RIGHT SIDE)			
	74A586872-1007	. TUBE ASSEMBLY, METAL - MOTIVE FLOW,	1	C	AGOGG
		VENT TK SCAV PUMP, RH (76301)			
		(RIGHT SIDE)			
6	74A586430-1005	. TUBE ASSEMBLY, METAL - SCAVENGE	1		XBOZZ
		PICKUP, TANK NO. 4 (76301) (SUPERSEDES			
		74A586430-1001 AND 74A586430-1003)			
7	74A586429-1033	. SUPPORT ASSEMBLY (76301) (FOR REPAIR	1		XBOOO
		SEE FIGURE 2)			
8	M25988/1-312	. PACKING	3		PAOZZ
9	NAS674V2	. BOLT	3		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 9)	3		PAOZZ

Figure 1. No. 4 Fuel Tank Vent Scavenge Jet Ejector (5BAP559 or 5BAR560) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161353 THRU 161750	F/A-18A/B
B	161751 THRU 161931	F/A-18A/B
C	161932 & UP	F/A-18A/B

Figure 1. No. 4 Fuel Tank Vent Scavenge Jet Ejector (5BAP559 or 5BAR560) (Sheet 4)

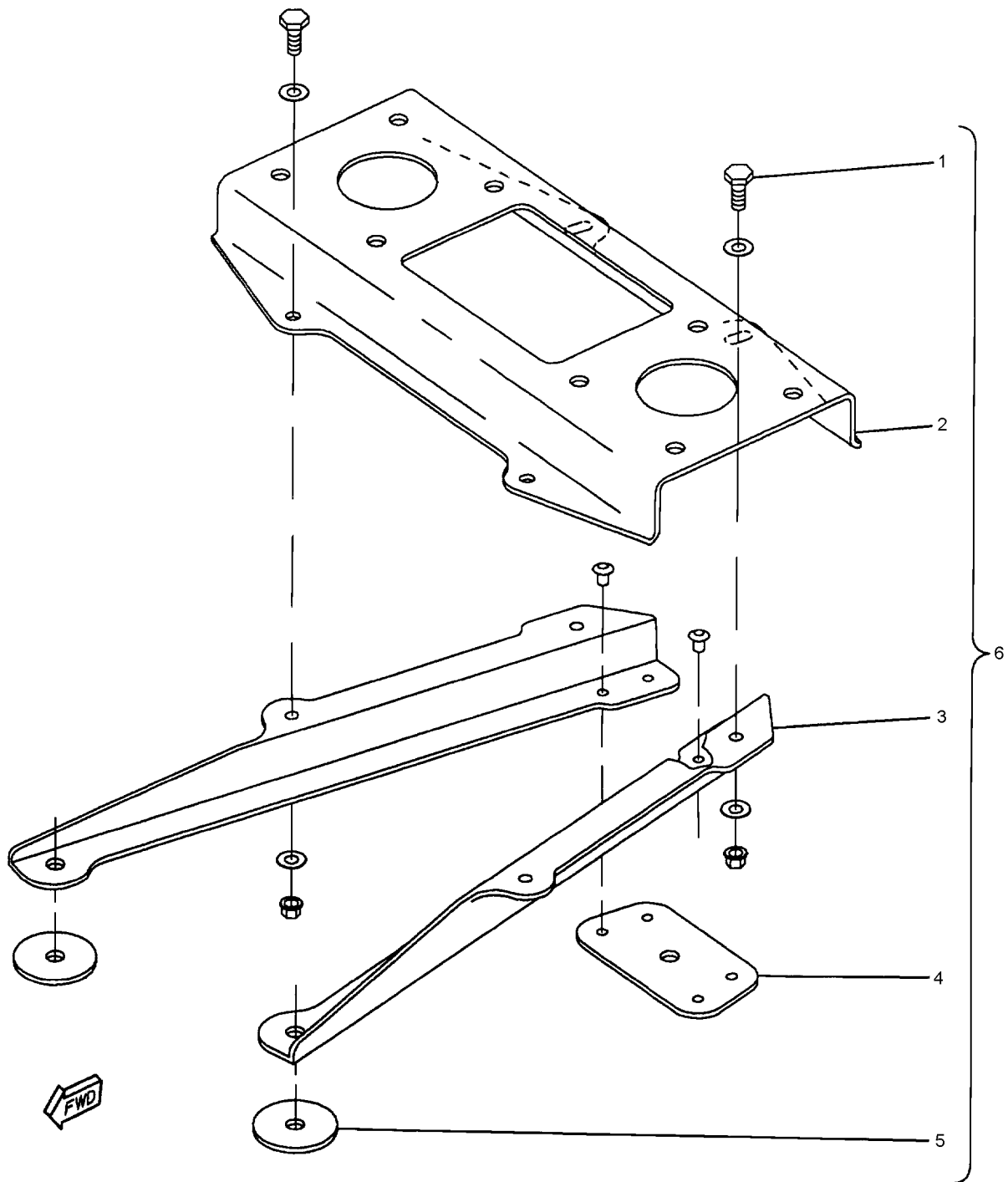


Figure 2. No. 4 Fuel Tank Vent Scavenge Jet Ejector Support (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		NO. 4 FUEL TANK VENT SCAVENGE JET									
		EJECTOR SUPPORT									
1	NAS673V3	.	BOLT						4		PAOZZ
	NAS620A10L	.	WASHER (USE WITH INDEX 1)						8		PAOZZ
	NAS1291C3M	.	NUTS (USE WITH INDEX 1)						4		PAOZZ
2	74A586429-2059	.	BRACKET (76301)						1		MGOZZ
3	74A586429-2067	.	SUPPORT (RH) (76301)						1		XBOZZ
	74A586429-2068	.	SUPPORT (LH) (76301)						1		XBOZZ
4	74A586429-2065	.	SHIM (76301)						1		MGOZZ
	MS20470AD5 #	.	RIVET (AP)						4		PAOZZ
5	74A586429-2063	.	SHIM (76301)						2		MGOZZ
6	74A586429-1033	.	SUPPORT ASSEMBLY (76301)						1		XBOOO

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

Figure 2. No. 4 Fuel Tank Vent Scavenge Jet Ejector Support (Sheet 2)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

VENT TANK SCAVENGE CHECK VALVE (5VAS602 OR 5VAT612)

INTERNAL FUEL TRANSFER SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Vent Tank Access Cover	WP009 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-200
Vent Tank Scavenge Test	WP021 00
Line Maintenance Procedures	A1-F18AC-LMM-000
Power Plant and Related Systems	A1-F18AC-270-300
Removal and Installation - Engine	WP003 00

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Record of Applicable Technical Directives

None

Support Equipment Required

1. REMOVAL.

None

NOTE

This procedure is typical for left or right vent tank scavenge check valve.

Materials Required

Nomenclature	Specification or Part Number
Packing (2)	MS29513-214
Packing	MS29513-216
Petrolatum, Technical	VV-P-236 (CAGE 81348)

- a. Do general preparation for removal (WP013 00).
- b. Remove left engine (A1-F18AC-270-300, WP003 00).
- c. Remove coupling (2, figure 1) and packings (1).
- d. Remove valve (3), packing (4) and attaching parts.

2. INSTALLATION.

a. Do general preparation for component installation (WP013 00).



Petrolatum

1

b. Lubricate new packings (1 and 4, figure 1) with petrolatum.

c. Prepare mating surfaces of valve (3, figure 1) and tube (5) for electrical bond (A1-F18AC-LMM-000).

d. Position valve (3) and packing (4) and install attaching parts.

e. Install packings (1) and coupling (2).

f. Install vent tank access cover (WP009 00).

g. Install left engine (A1-F18AC-270-300, WP003 00).

h. Connect utility and emergency battery connectors (WP013 00).

i. Do vent tank scavenge test (A1-F18AC-460-200, WP021 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

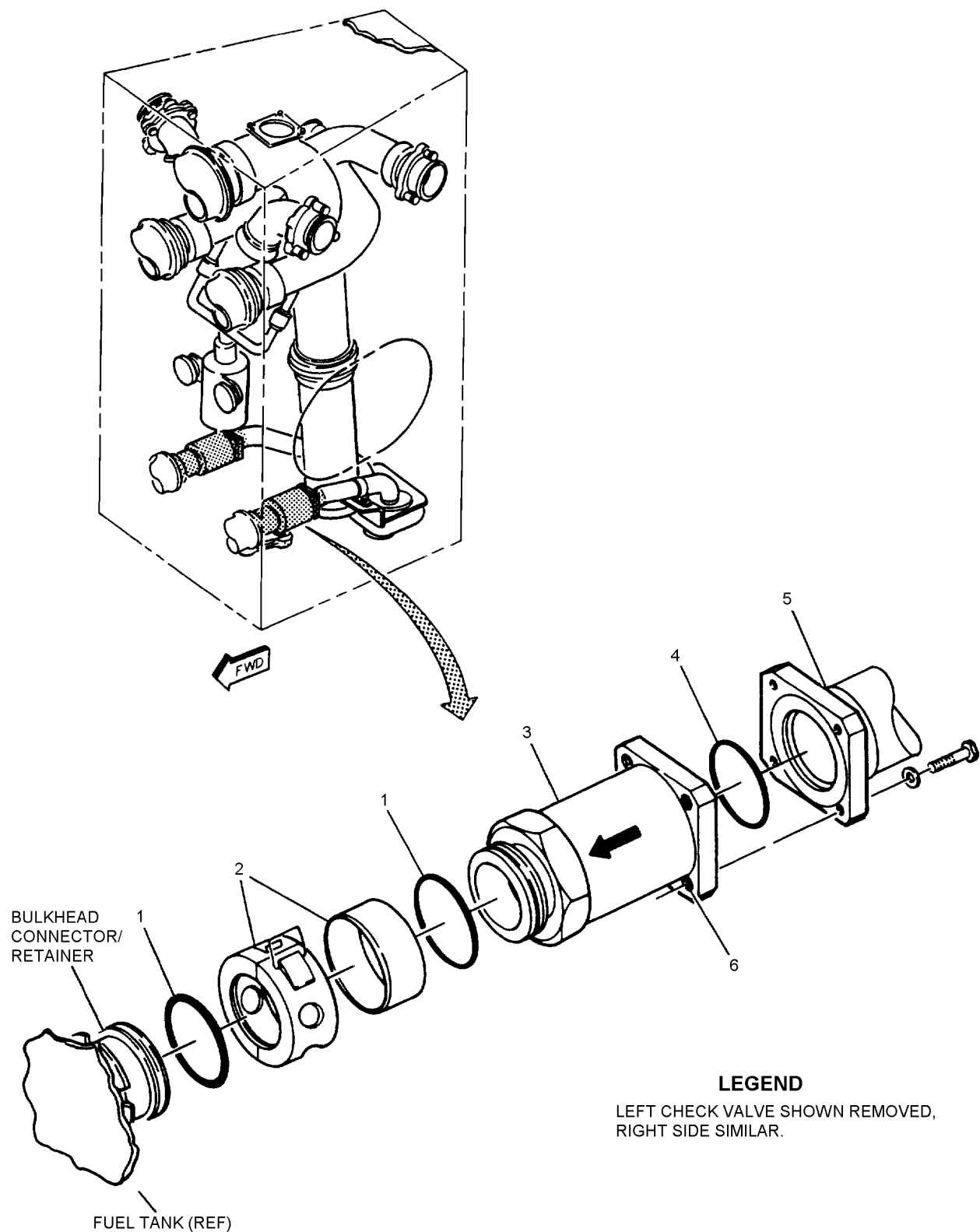


Figure 1. Vent Tank Scavenge Check Valve (5VAS602 or 5VAT612) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		VENT TANK SCAVENGE CHECK VALVE									
		(5VAS602 OR 5VAT612)									
1	MS29513-214	.						PACKING	2		PAOZZ
2	W901K16DE	.						COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)									
		(INCLUDES SLEEVE)									
	14J12-16A	.						COUPLING, CLAMP, GROOVED (24984)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)									
		(INCLUDES SLEEVE)									
	W901F16DE	.						COUPLING, CLAMP, GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M550-16D)									
		(INCLUDES SLEEVE)									
	W901C16DE	.						COUPLING, CLAMP, GROOVED (24984)	1	*	PAOZZ
		(MCDONNELL SPEC 7M550-16D)									
		(INCLUDES SLEEVE)									
3	2S2726	.						VALVE, CHECK - FUEL, SMALL LINE	1		PAOZZ
		MOUNTED (VENT TANK SCAVENGE									
		CHECK VALVE) (99240) (MCDONNELL SPEC									
		74-580125-107) (5VAS602 OR 5VAT612)									
	NAS673V1	.						BOLT (AP)	4		PAOZZ
	AN960JD10	.						WASHER (AP)	4		PAOZZ
4	MS29513-216	.						PACKING	1		PAOZZ
5	74A586518-1001	.						TUBE ASSEMBLY, METAL - SCAVENGE	1		XBOZZ
		PUMP INLET, VENT TANK (76301)									
		(LEFT SIDE)									
	74A586518-1002	.						TUBE ASSEMBLY, METAL - SCAVENGE	1		XBOZZ
		PUMP INLET, VENT TANK (76301)									
		(RIGHT SIDE)									
6	MS21209F1-15	.						INSERT	4		PAOZZ
* ALTERNATE OR EQUIVALENT PARTS.											
(WP002 00)											

Figure 1. Vent Tank Scavenge Check Valve (5VAS602 or 5VAT612) (Sheet 2)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
SCAVENGE PUMP INLET SCREEN (5FAS604)
INTERNAL FUEL TRANSFER SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Vent Tank Access Cover	WP009 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

None

- c. Remove tubes (2 and 6) with clamps (5).
d. Remove strainer (7), bolts (4), and washers.

Materials Required

Nomenclature	Specification or Part Number
Packings (2)	MS29513-216
Petrolatum, Technical	VV-P-236 (CAGE 81348)

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum 1

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
b. Remove packings (1, figure 1), bolts (3 and 4) and washers.

- b. Lubricate new packings (1, figure 1) with petrolatum.
c. Prepare mating surfaces of strainer (7), vent tank scavenge check valves and tubes (2 and 6) for electrical bond (A1-F18AC-LMM-000).

d. Install strainer (7), tubes (2 and 6), bolts (4) and washers.

e. Install packings (1), bolts (3 and 4) and washers, and connect tubes (2 and 6) to vent tank scavenge check valves.

f. Install access cover (WP009 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

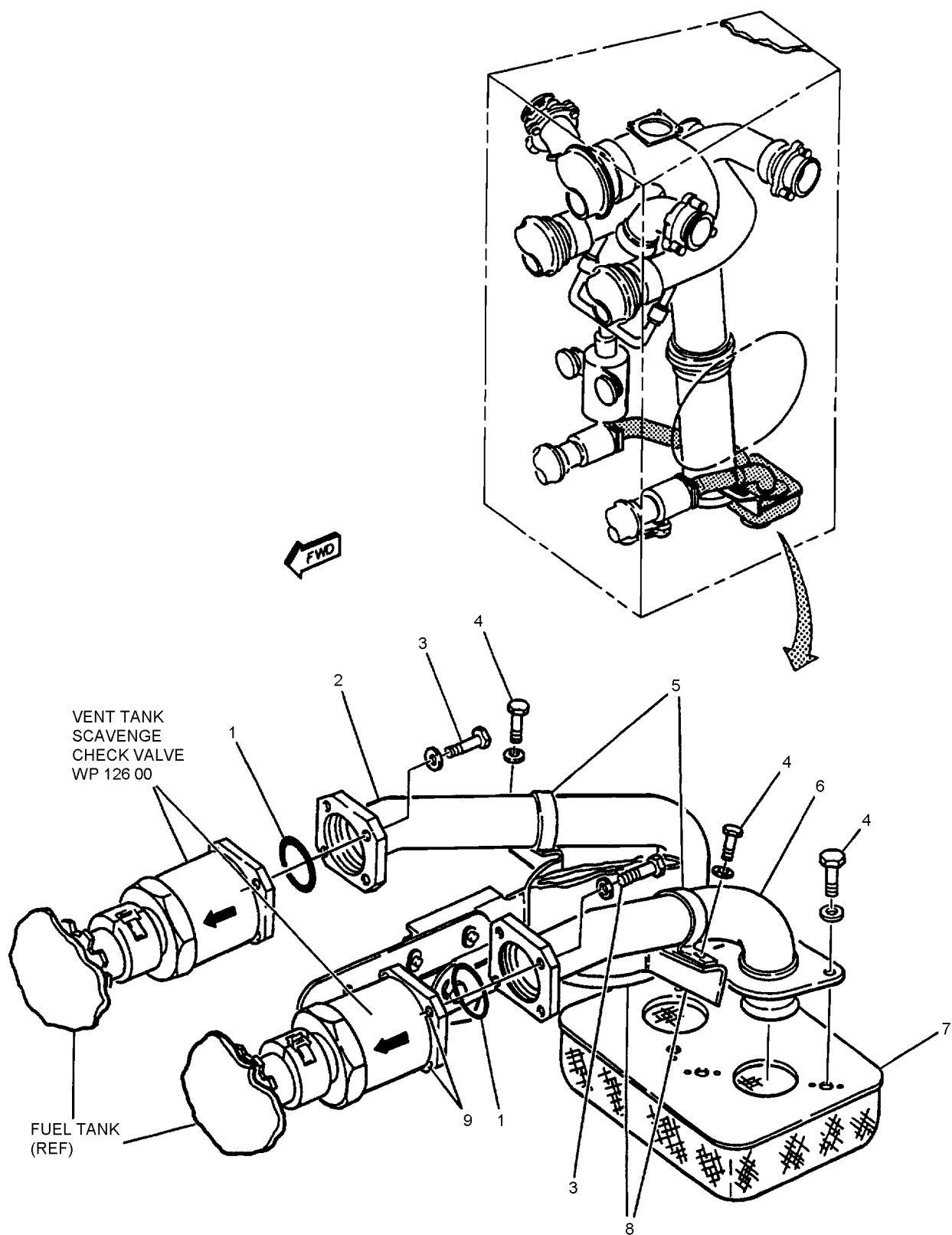


Figure 1. Scavenge Pump Inlet Screen (5FAS604) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		SCAVENGE PUMP INLET SCREEN (5FAS604)			
1	MS29513-216	. PACKING	2		PAOZZ
2	74A586518-1002	. TUBE ASSEMBLY METAL - SCAVENGE	1		XBOZZ
		PUMP INLET, VENT TANK (76301)			
3	NAS673V1	. BOLT	8		PAOZZ
	AN960JD10	. WASHER (USE WITH INDEX 3)	8		PAOZZ
4	NAS673V3	. BOLT	6		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 4)	6		PAOZZ
5	MS25281-R16	. CLAMP	2		PAOZZ
	A11144A7-3	. NUT, CLIP (72962) (MCDONNELL SPEC	2	*	PAOZZ
		ST3M523C3M) (USE WITH INDEX 5)			
	A11144-7-3	. SEE ABOVE	2	*	PAOZZ
	130091	. SEE ABOVE (60119)	2	*	PAOZZ
6	74A586518-1001	. TUBE ASSEMBLY, METAL - SCAVENGE	1		XBOZZ
		PUMP INLET, VENT TANK (76301)			
7	69-303	. STRAINER ELEMENT, SEDIMENT -	1		PAOZZ
		SCAVENGE PUMP INLET, VENT TK (SCAVENGE PUMP INLET SCREEN) (14818) (MCDONNELL SPEC 74J588001-101) (5FAS604)			
8	74A586515-1001	. TUBE ASSEMBLY, METAL - VENT LINE,	1		XBOOO
		LOWER VENT TANK (76301)			
	MS21060L3	. NUT, PLATE (USE WITH INDEX 8)	2		PAOZZ
	MS20426AD3 #	. RIVETS (AP)	2		-
9	MS21209F1-15	. INSERT	4		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

Figure 1. Scavenge Pump Inlet Screen (5FAS604) (Sheet 2)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
FUEL LEVEL CONTROL SELECTOR VALVE (5VAG579)
INTERNAL FUEL TRANSFER SYSTEM

Reference Material

Fuel System A1-F18AC-460-200
Internal Fuel Transfer and Engine Fuel Supply System Test WP012 00
Line Maintenance Procedures A1-F18AC-LMM-000

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Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC - 53	-	Elimination of Tanks 1 and 4 Sneak Circuit, Tank 4 Motive Flow Shut Off Valve, and Raised Inverted Baffle (ECP MDA-F/A-18-00055/C1)	15 Jul 86	-

Support Equipment Required

None

**Materials Required**

Nomenclature	Specification or Part Number
Packing (4)	MS29512-04
Petrolatum, Technical	VV-P-236 (CAGE 81348)

Petrolatum

1

b. Lubricate new packings with petrolatum before installation.

NOTE

Make sure caps are installed on nipple or elbows, if applicable.

1. REMOVAL.

a. Observe applicable fuel tank maintenance precautions (WP013 00).

b. Make sure electrical power is off (A1-F18AC-LMM-000).

c. Position an approved safety container under valve (1, figure 1) to catch residual fuel.

d. Disconnect tube (4, detail A).

e. On 161353 THRU 161761 BEFORE F/A-18 AFC 53, disconnect tubes (3 and 10).

f. Remove screws (6) and valve (1).

c. Install new packings and nipples (2 and 5, figure 1, detail A).

d. Install new packings, elbows (7 and 12) and attaching parts. Do not tighten nuts (9 and 11).

e. Prepare mating surfaces of valve (1) and aircraft structure for electrical bond at screw connections (A1-F18AC-LMM-000).

f. Install valve (1) and screws (6).

g. Connect tube (4).

h. On 161353 THRU 161761 BEFORE F/A-18 AFC 53, connect tubes (3 and 10).

i. Tighten nut (11).

j. Position elbow (7) to avoid interference with surrounding tubes and structure. Tighten nut (9).

k. Do internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

NOTE

Caps need not be removed from elbows or nipple, if applicable.

g. Loosen nuts (9 and 11) and remove elbows (7 and 12) and attaching parts.

h. Remove nipples (2 and 5) and packings.

2. INSTALLATION.**NOTE**

Make sure corrosion prevention of fasteners and attaching parts is done during installation (A1-F18AC-LMM-000).

a. Make sure electrical power is off (A1-F18AC-LMM-000).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

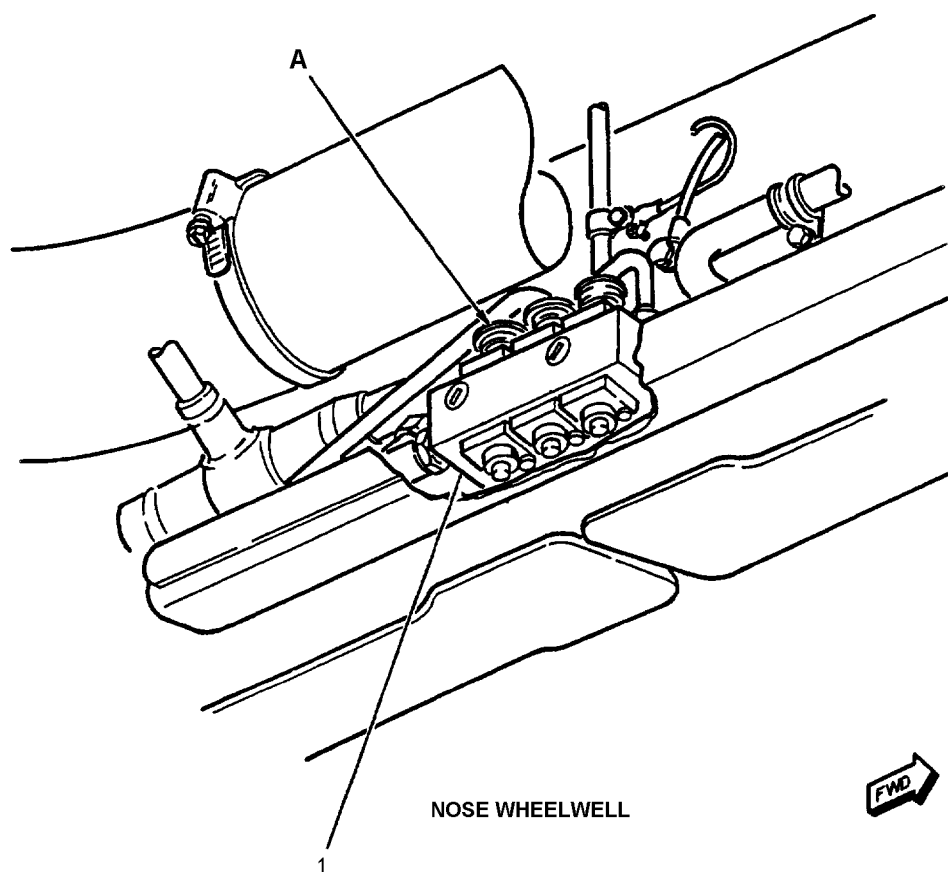


Figure 1. Fuel Level Control Selector Valve (5VAG579) (Sheet 1)

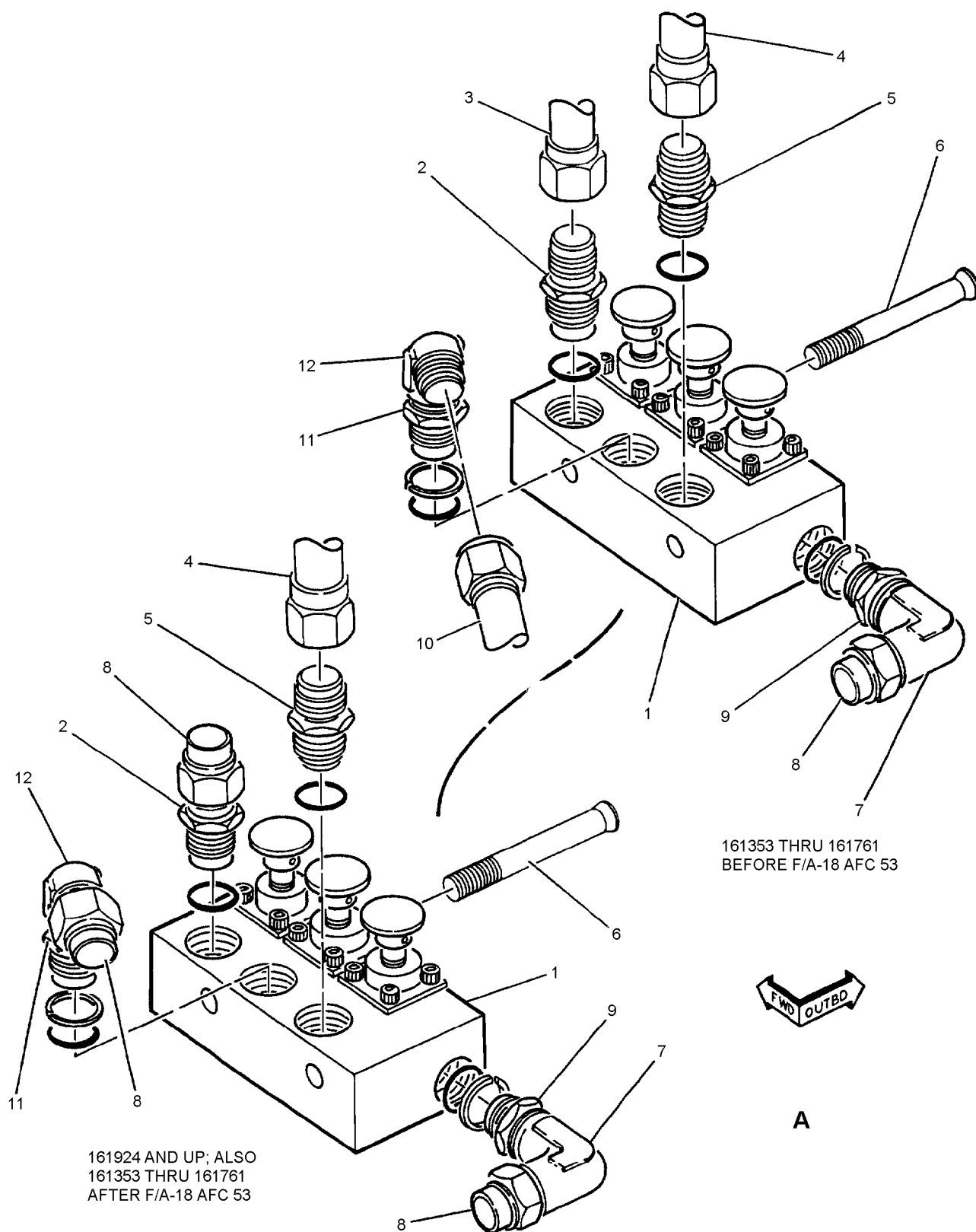


Figure 1. Fuel Level Control Selector Valve (5VAG579) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		FUEL LEVEL CONTROL SELECTOR									
		VALVE (5VAG579)									
1	78D4A	.	VALVE ASSEMBLY - POPPET, SELECT						1		PAOZZ
			GROUND CHECKOUT (FUEL LEVEL								
			CONTROL SELECTOR VALVE) (91511)								
			(MCDONNELL SPEC 74-580053-103)								
			(5VAG579)								
2	7M637BD-4D	.	NIPPLE (76301)						1		PAOZZ
	MS29512-04	.	PACKING (USE WITH INDEX 2)						1		PAOZZ
3	74A580669-1003	.	TUBE ASSEMBLY, FUEL TRANS PRECHECK,						1	B	MGOZZ
			Y329.449 (76301)								
	74A580669-1005	.	TUBE ASSEMBLY, FUEL TRANS PRECHECK,						1	A	MGOZZ
			Y329.449 (76301)								
4	74A580657-1003	.	TUBE ASSEMBLY, METAL - PRECHECK,						1	B	MGOZZ
			Y323.877 (76301)								
	74A580657-1005	.	TUBE ASSEMBLY, METAL - PRECHECK,						1	A	MGOZZ
			Y323.877 (76301)								
5	7M637BD-4D	.	NIPPLE (76301)						1		PAOZZ
	MS29512-04	.	PACKING (USE WITH INDEX 5)						1		PAOZZ
6	HT4025L4-29	.	SCREW, CLOSE TOLERANCE (73197)						2		PAOZZ
			(MCDONNELL SPEC ST3M454-4L-29)								
7	7M637BW-4D	.	ELBOW, TUBE (76301)						1		PAOZZ
	MS28773-04	.	RETAINER (USE WITH INDEX 7)						1		PAOZZ
	MS29512-04	.	PACKING (USE WITH INDEX 7)						1		PAOZZ
8	AN929-4D	.	CAP ASSEMBLY						1	D	PAOZZ
	AN929-4D	.	CAP ASSEMBLY						3	C	PAOZZ
9	AN6289D4	.	NUT						1		PAOZZ
10	74A580656-1005	.	TUBE ASSEMBLY, METAL - PRECHECK,						1	B	MGOZZ
			Y332.492 (76301)								
	74A580656-1007	.	TUBE ASSEMBLY, METAL - PRECHECK,						1	A	MGOZZ
			Y332.492 (76301)								
11	AN6289D4	.	NUT						1		PAOZZ
12	7M637BW-4D	.	ELBOW (76301)						1		PAOZZ
	MS28773-04	.	RETAINER (USE WITH INDEX 12)						1		PAOZZ
	MS29512-04	.	PACKING (USE WITH INDEX 12)						1		PAOZZ

CODE	USABLE ON	MODEL
A	161717 & UP	F/A-18A/B
B	161353 THRU 161716	F/A-18A/B
C	161924 & UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 53	F/A-18A/B
D	161353 THRU 161761 BEFORE F/A-18 AFC 53	F/A-18A/B

Figure 1. Fuel Level Control Selector Valve (5VAG579) (Sheet 3)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****NO. 1 FUEL TANK TRANSFER PRECHECK VALVE (5VAP606)****INTERNAL FUEL TRANSFER SYSTEM****EFFECTIVITY: 161353 THRU 161965 BEFORE F/A-18 AFC 53****Reference Material**

Fuel System	A1-F18AC-460-300
No. 1 Fuel Tank Access Cover (F/A-18A)	WP003 00
No. 1 Fuel Tank Access Cover (F/A-18B)	WP004 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer and Engine Fuel Supply System	WP012 00

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Record of Applicable Technical Directives

None

Support Equipment Required

None

b Disconnect elbows (2 and 3, figure 1) and tube (1).

c. Remove valve (4).

Materials Required

None

2. INSTALLATION.**1. REMOVAL.**

a. Do general preparation for removal (WP013 00).

a. Do general preparation for component installation (WP013 00).

b. Connect tube (1, figure 1) and elbows (2 and 3) to valve (4).

c. Install access cover (WP003 00 or WP004 00).

d. Do internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

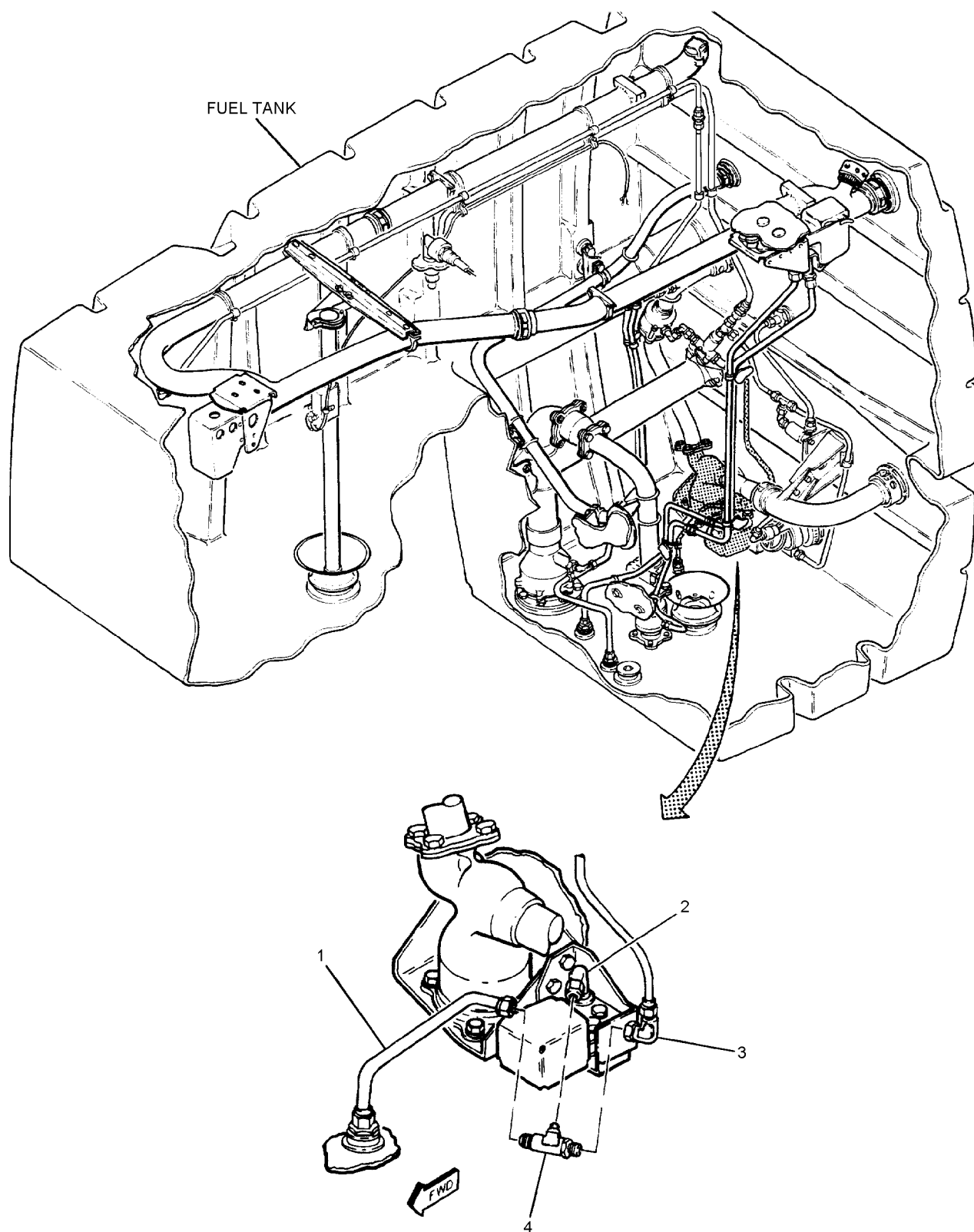


Figure 1. No. 1 Fuel Tank Transfer Precheck Valve (5VAP606) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 1 FUEL TANK TRANSFER PRECHECK VALVE (5VAP606)			
1	74A582160-1003	. TUBE ASSEMBLY, METAL - PRECHECK Y374.641 (76301)	1		MGOZZ
2	ST7M263V6	. ELBOW (76301)	1		PAOZZ
	ST7M263DA6	. ELBOW (76301)	1	*	PAOZZ
3	7M148V6	. ELBOW (76301)	1		PAOZZ
	7M148DA6	. ELBOW (76301)	1	*	PAOZZ
4	18-1200	. VALVE, CONTROL (NO. 1 FUEL TANK TRANSFER PRECHECK VALVE) (96736) (MCDONNELL SPEC 74B580184-103) (5VAP606)	1	*	PAOZZ
	2770221-103	. VALVE FLOW CONTROL (NO. 1 FUEL TANK TRANSFER PRECHECK VALVE) (92003) (MCDONNELL SPEC 74B580184-103) (5VAP606)	1	*	PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

Figure 1. No. 1 Fuel Tank Transfer Precheck Valve (5VAP606) (Sheet 2)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****NO. 4 FUEL TANK TRANSFER PRECHECK VALVE (5VAP589)****INTERNAL FUEL TRANSFER SYSTEM****EFFECTIVITY: 161353 THRU 161965 BEFORE F/A-18 AFC 53****Reference Material**

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Aft Access Cover and Tank Entry Procedure	WP008 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-200
No. 4 Fuel Tank Transfer Test	WP012 06

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Record of Applicable Technical Directives

None

Support Equipment Required

None

b. Do no. 4 fuel tank aft access cover and tank entry procedure removal (WP008 00).

c. Disconnect tubes (3 and 4, figure 1) and remove valve (2) from elbow (1).

Materials Required

None

2. INSTALLATION.

a. Do general preparation for component installation (WP013 00).

b. Install valve (2, figure 1) on elbow (1).

c. Connect tubes (3 and 4) to valve (2).

1. REMOVAL.

a. Do general preparation for removal (WP013 00).

d. Do no. 4 fuel tank aft access cover and tank entry procedure installation (WP008 00).

e. Do no. 4 fuel tank transfer test (A1-F18AC-460-200, WP012 06).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

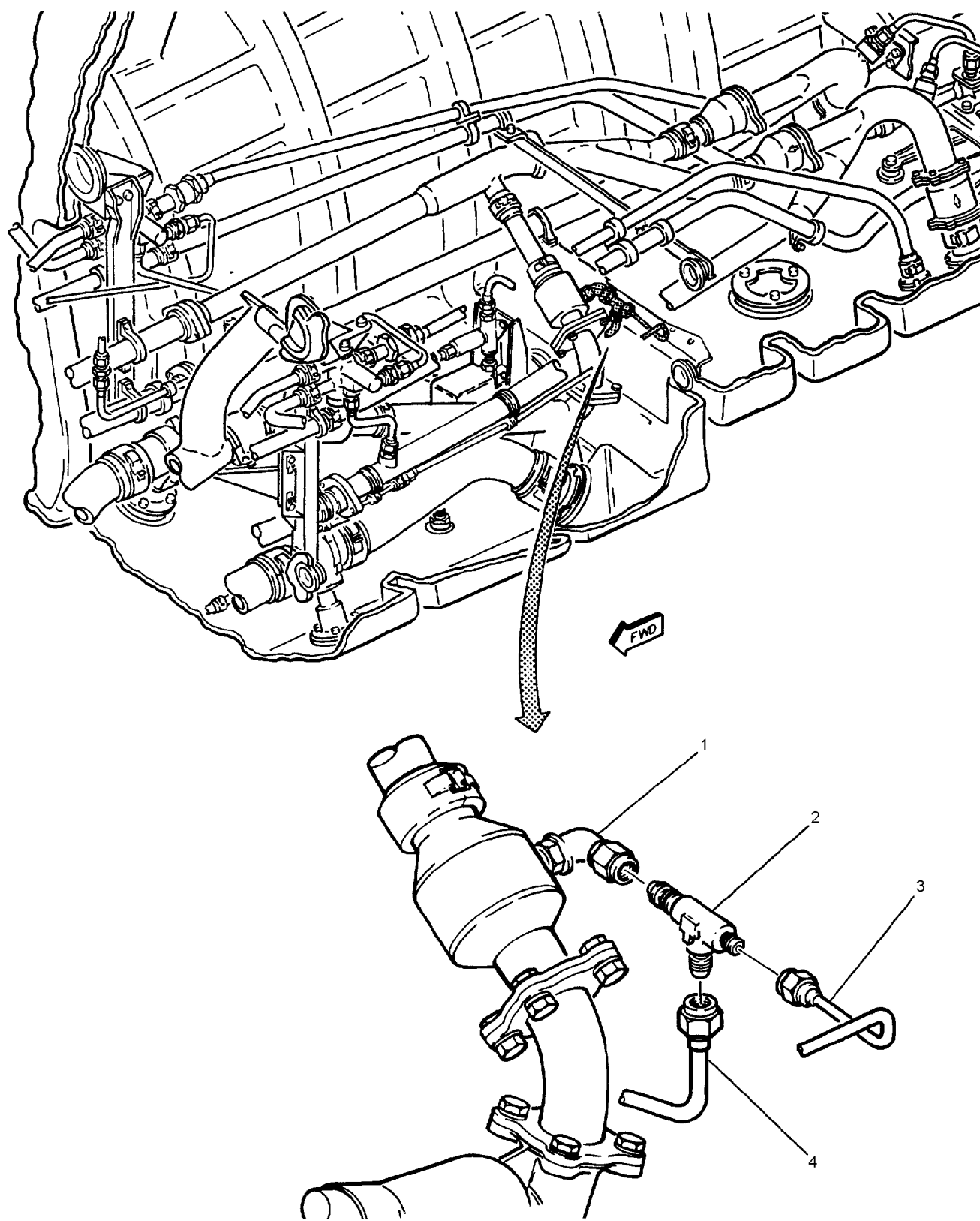


Figure 1. No. 4 Fuel Tank Transfer Precheck Valve (5VAP589) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		NO. 4 FUEL TANK TRANSFER PRECHECK									
		VALVE (5VAP589)									
1	ST7M263V6	.	ELBOW (76301)					1		PAOZZ	
	ST7M263DA6	.	ELBOW (76301)					1	*	PAOZZ	
2	18-1200	.	VALVE, FLOW CONTROL (NO. 4 FUEL					1	*	PAOZZ	
		TANK TRANSFER PRECHECK VALVE)									
		(96736) (MCDONNELL SPEC 74-580184-103)									
		(5VAP589)									
	2770221-103	.	VALVE FLOW CONTROL (NO. 4 FUEL TANK					1	*	PAOZZ	
		TRANSFER PRECHECK VALVE) (92003)									
		(MCDONNELL SPEC 74-580184-103)									
		(5VAP589)									
3	74A586692-1003	.	TUBE ASSEMBLY METAL - SYSTEM CHECK					1		MGOZZ	
		Y497 TO Y518 (76301)									
4	74A586856-1003	.	TUBE ASSEMBLY, METAL - FUEL LEVEL					1	A	MGOZZ	
		SENSOR TANK NO. 4 (76301)									
	74A586508-1003	.	TUBE ASSEMBLY, METAL - SOLENOID TO					1	B	MGOZZ	
		PRECHECK LEVEL SENSOR TANK									
		NO. 4 (76301)									
* ALTERNATE OR EQUIVALENT PARTS.											
(WP002 00)											
		CODE	USABLE ON				MODEL				
		A	161353 THRU 161761				F/A-18A/B				
		B	161924 & UP				F/A-18A/B				

Figure 1. No. 4 Fuel Tank Transfer Precheck Valve (5VAP589) (Sheet 2)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****NO. 2 FUEL TANK WASH FILTER (5FAP632)****ENGINE FUEL SUPPLY SYSTEM**

Title	WP Number
No. 2 Fuel Tank Wash Filter - 161353 THRU 161715 BEFORE F/A-18 AFC 18 AND F/A-18	
AFC 53	131 01
No. 2 Fuel Tank Wash Filter - 161716 THRU 161761 BEFORE F/A-18 AFC 18 AND F/A-18	
AFC 53	131 02
No. 2 Fuel Tank Wash Filter - 161924 AND UP; ALSO 161353 THRU 161761 AFTER F/A-18	
AFC 18 AND F/A-18 AFC 53	131 03

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 2 FUEL TANK WASH FILTER (5FAP632)

ENGINE FUEL SUPPLY SYSTEM

EFFECTIVITY: 161353 THRU 161715 BEFORE F/A-18
AFC 18 AND F/A-18 AFC 53

Reference Material

Fuel System	A1-F18AC-460-300
No. 2 Fuel Tank Access Cover	WP005 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer and Engine Fuel Supply System	WP012 00
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP	Date Incorp.	Remarks
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 83	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (2)	MS29512-06
Packing (4)	MS29513-222
Packing (4)	MS29513-226
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove bolts (1, figure 1), guide (2), and attaching parts.
- c. Remove tube (5, detail A), couplings (4), and packings (3).
- d. Remove and loosen bolts (8, detail B) and washers, as required, to remove retainers (9 and 10) and webs (7 and 11).
- e. Disconnect tubes (12, 15, and 24, detail C).
- f. Disconnect clamps (16 and 19) and remove clamp (20) and attaching parts.
- g. Remove couplings (18), packings (17), and wash filter (23).
- h. Remove tee (14), elbow (25), and packings (13).

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings with petrolatum.
- c. Install packings (13, figure 1, detail C), tee (14), and elbow (25) and attaching parts.
- d. Prepare mating surfaces of clamp (20) and support (21) for electrical bond (A1-F18AC-LMM-000).
- e. Position wash filter (23) below baffle, then install clamp (20) and attaching parts.
- f. Connect clamps (16 and 19) and install attaching parts.
- g. Connect tubes (12, 15, and 24).
- h. Install packings (17) and couplings (18).
- i. Inspect and remove any foreign objects below baffle. (QA)
- j. Install web (7, detail B) over web (11), then install retainer (9) over retainer (10).
- k. Install bolts (8) and washers as required. Tighten bolts (8) loosened during removal.
- l. Install packings (3, detail A), tube (5), and couplings (4).
- m. Install guide (2, figure 1), bolts (1), and attaching parts.
- n. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)
- o. Install no. 2 fuel tank access cover (WP005 00).
- p. Connect utility and emergency battery connectors (WP013 00).
- q. Do internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

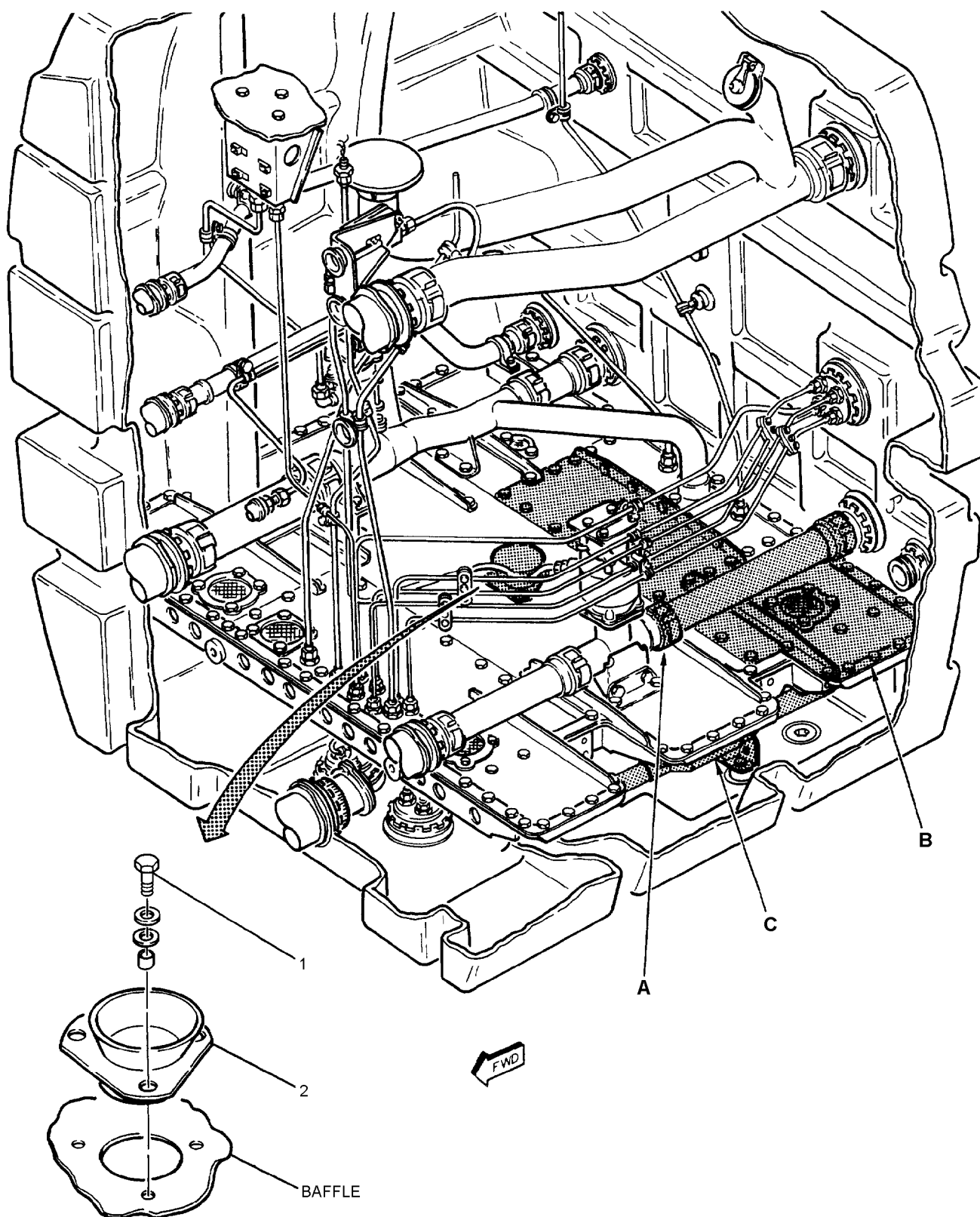


Figure 1. No. 2 Fuel Tank Wash Filter (5FAP632) (Sheet 1)

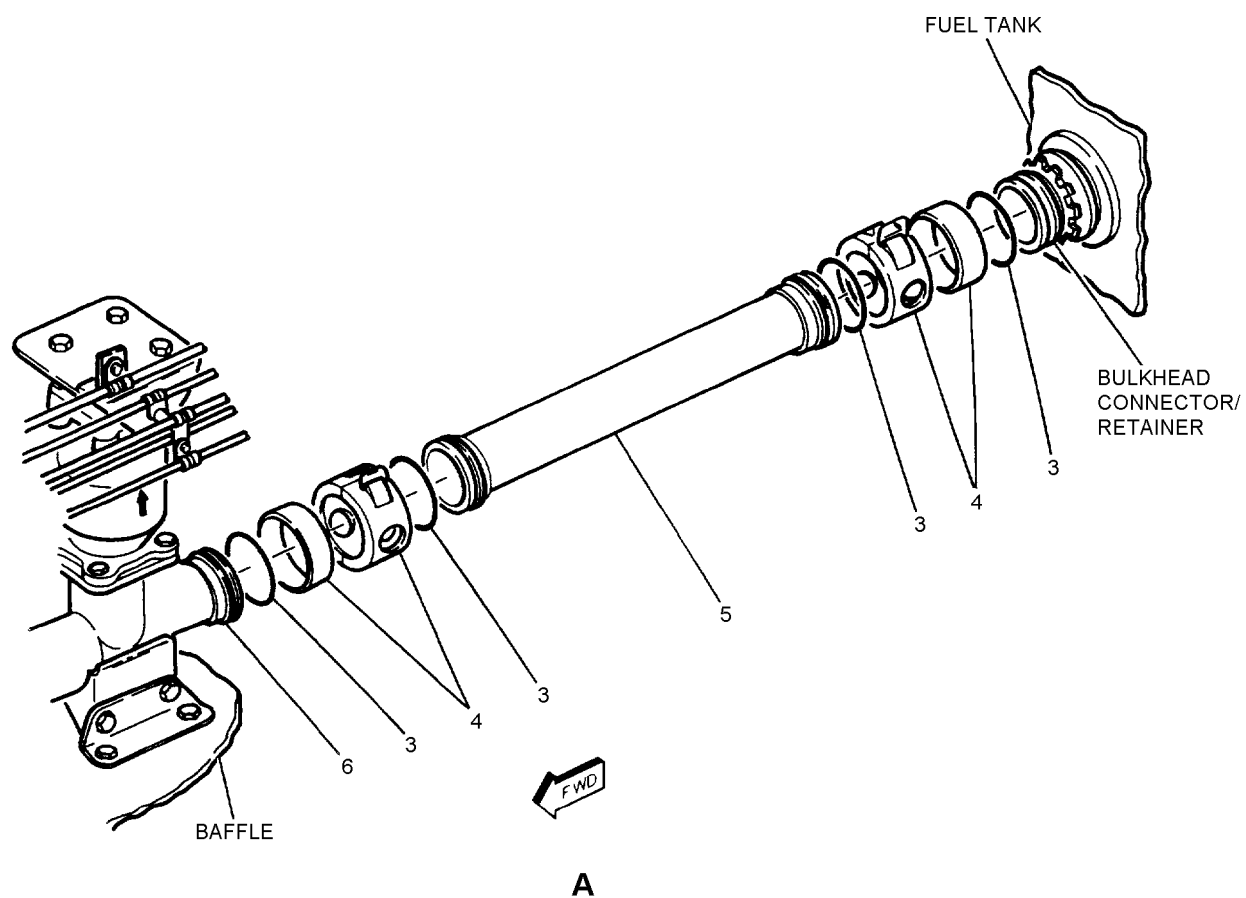


Figure 1. No. 2 Fuel Tank Wash Filter (5FAP632) (Sheet 2)

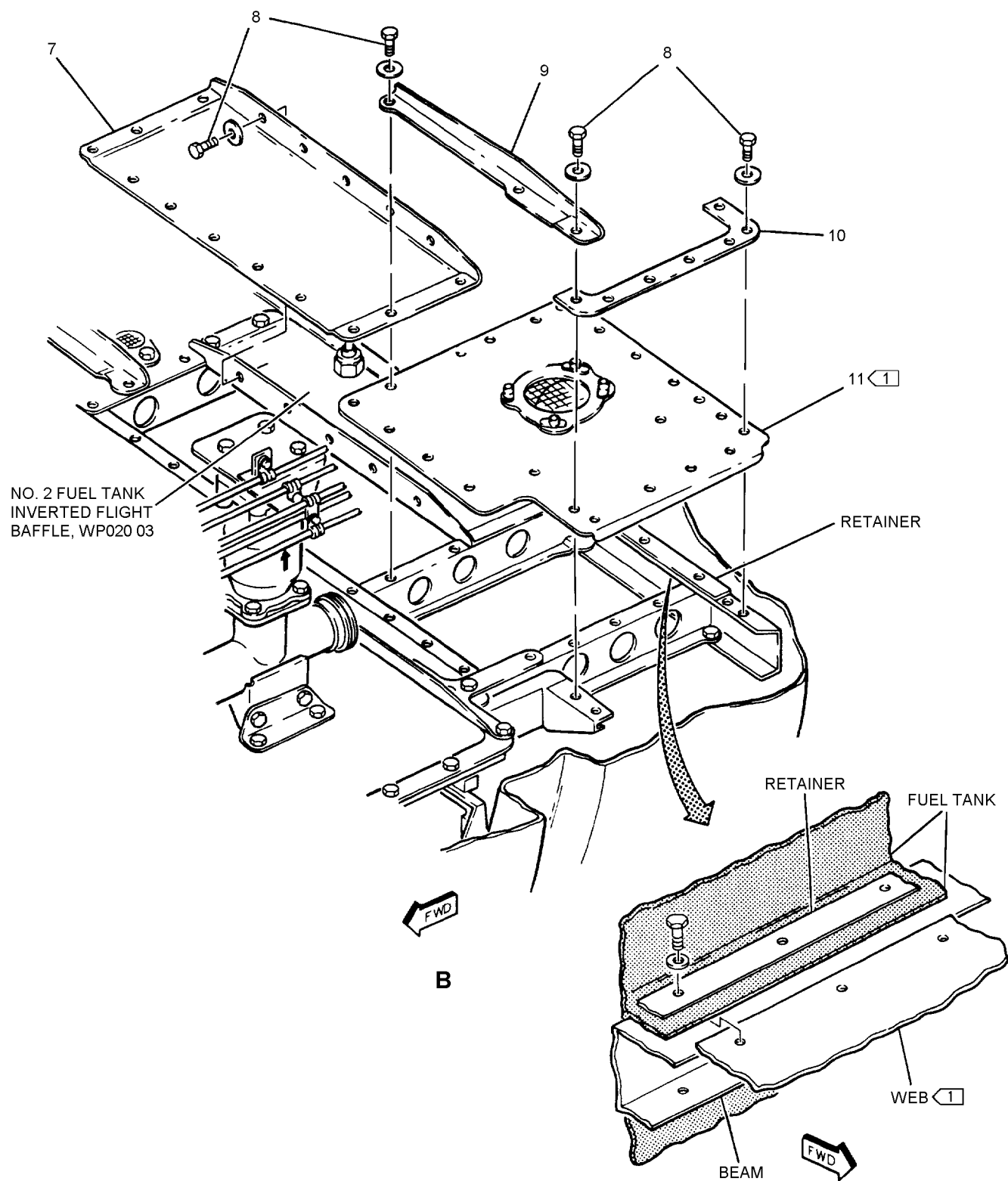
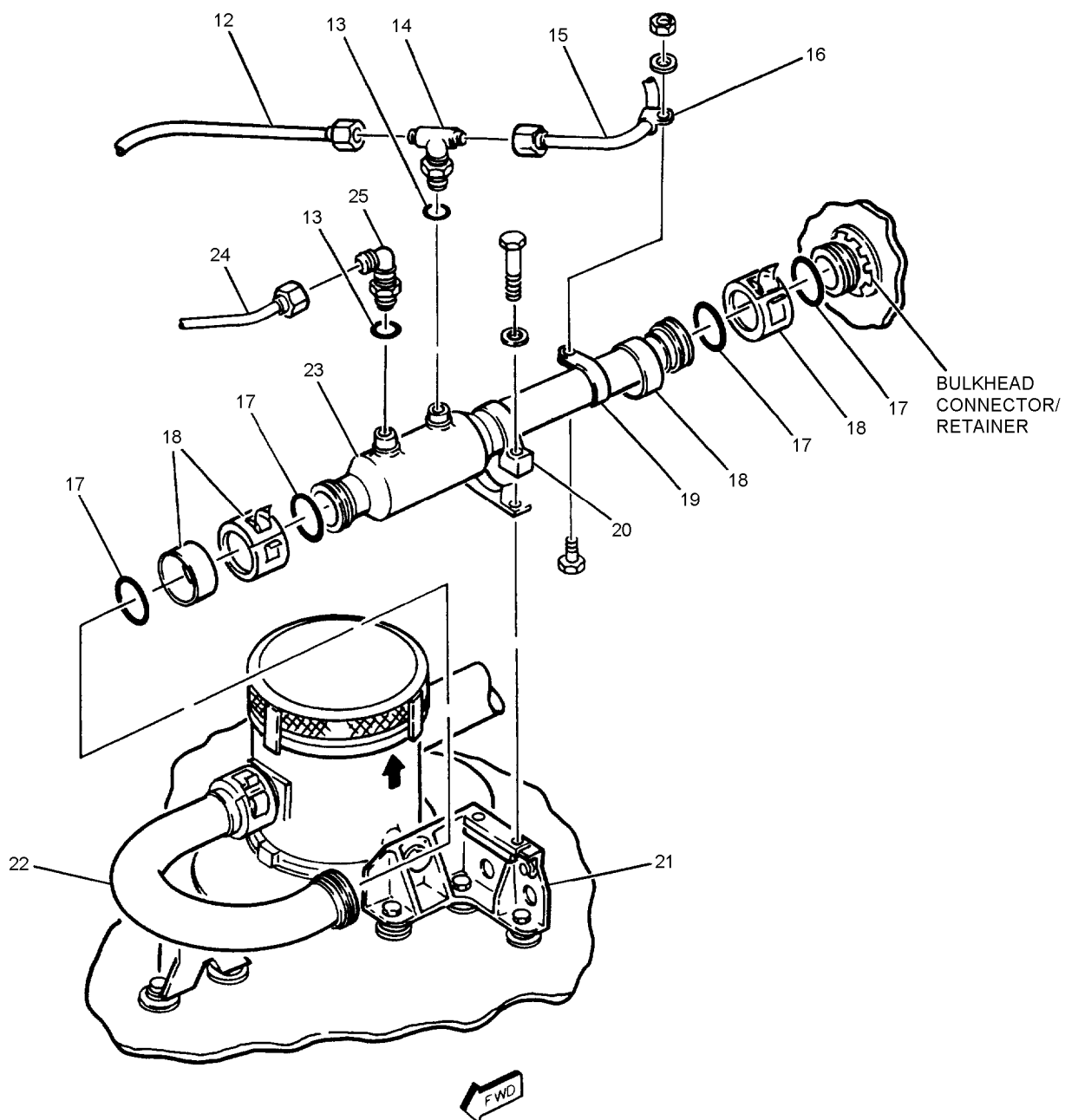


Figure 1. No. 2 Fuel Tank Wash Filter (5FAP632) (Sheet 3)



C

LEGEND

- 1 WEB (11) IS INSTALLED BETWEEN BEAM AND FUEL TANK.

Figure 1. No. 2 Fuel Tank Wash Filter (5FAP632) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 2 FUEL TANK WASH FILTER (5FAP632)			
1	NA5673V4	. BOLT	3		PAOZZ
	NAS43DD3-8	. SPACER (USE WITH INDEX 1)	3		PAOZZ
	4M36-01016	. WASHER (76301) (USE WITH INDEX 1)	6		PAOZZ
2	74A586297-2001	. GUIDE PROBE - FUEL QTY TANK 2 & 3 (76301)	1		XBOZZ
3	MS29513-226	. PACKING	4		PAOZZ
4	W901K32DE	. COUPLING, CLAMP GROOVED (79326) (MCDONNELL SPEC 7M765-32D) (INCLUDES SLEEVE)	2	*	PAOZZ
	14J12-32A	. COUPLING, CLAMP GROOVED 2 & 3 (28984) (MCDONNELL SPEC 7M765-32D) (INCLUDES SLEEVE)	2	*	PAOZZ
5	74A586265-1003	. TUBE ASSEMBLY, METAL - FUEL TRANSFER SYSTEM TANK NO. 2 (76301) (SUPERSEDES 74A586265-1001)	1		XBOZZ
6	74A586266-1003	. TEE ASSY, TRANSFER PUMP - TANK NO. 2 (76301) (SUPERSEDES 74A586266-1001)	1		XBOOO
	NS103597-02	. NUT SELF-LOCKING, PLATE (80539) (MCDONNELL SPEC ST3M470C3M) (USE WITH INDEX 6)	4	*	PAOZZ
	F10965-1-3	. NUT, SELF-LOCKING PLATE (72962) (MCDONNELL SPEC ST3M470C3M) (USE WITH INDEX 6)	4	*	PAOZZ
	F29339-01-3	. NUT SELF-LOCKING PLATE (15653) (MCDONNELL SPEC ST3M470C3M) (USE WITH INDEX 6)	4	*	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
7	74A586204-2415	. WEB (76301)	1		MGOZZ
8	NAS673V5	. BOLT	AR		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 8)	AR		PAOZZ
9	74A586204-2235	. RETAINER (76301)	1		MGOZZ
10	74A586204-2251	. RETAINER (76301)	1		MGOZZ
11	74A586204-2431	. WEB ASSY (76301) (FOR REPAIR SEE WP020 05)	1		XBOOO
12	74A586274-1001	. TUBE ASSEMBLY METAL - SCAV MOTIVE FL, Y406 TEE - Y397 PUMP (76301)	1		MGOZZ
13	MS29512-06	. PACKING	2		PAOZZ
14	AN834-6D	. TEE	1		PAOZZ
	AN924-6D	. NUT (USE WITH INDEX 14)	1		PAOZZ
15	74A586827-1001	. TUBE ASSEMBLY METAL - PRESS FILTER TEE - Y410 VALVE TEE (76301)	1		MGOZZ
16	MS25281-6	. CLAMP	1		PAOZZ
17	MS29513-222	. PACKING	4		PAOZZ
18	W901K24DE	. COUPLING, CLAMP GROOVED (79326) (MCDONNELL SPEC 7M765-24D) (INCLUDES SLEEVE)	2		PAOZZ
	14J12-24A	. COUPLING CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-24D) (INCLUDES SLEEVE)	2		PAOZZ
	W901F24DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-24D) (INCLUDES SLEEVE)	2	*	PAOZZ

Figure 1. No. 2 Fuel Tank Wash Filter (5FAP632) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
19	MS25281-R24	.						CLAMP (SUPERSEDES MS25281-24)	1		PAOZZ
	NAS673V2	.						BOLT (AP)	1		PAOZZ
	AN960JD10L	.						WASHER (AP)	1		PAOZZ
	NAS1291C3M	.						NUT (AP)	1		PAOZZ
20	NAS1787A24G	.						CLAMP	1		PAOZZ
	NAS673V5	.						BOLT (AP)	2		PAOZZ
	AN960JD10L	.						WASHER (AP)	2		PAOZZ
21	74A586666-1003	.						SUPPORT, FUEL PUMP - MAIN EJECTOR	1		XBOGG
								TANK NO. 2 (76301)			
22	74A586269-1003	.						TUBE ASSEMBLY METAL - FUEL BOOST	1		XBOZZ
								PMP MOTIVE FL TK NO. 2 (76301)			
23	74A586268-1001	.						FILTER, FLUID PRESSURE - FUEL WASH	1		PAOZZ
								(NO. 2 FUEL TANK WASH FILTER)			
								(76301) (5FAP632)			
24	74A586275-1001	.						TUBE ASSEMBLY METAL - PRESS SENSOR,	1		MGOZZ
								Y403 ELB - Y387/Z103 UN (76301)			
25	7M637BW-6D	.						ELBOW (76301)	1		PAOZZ
	AN924-6D	.						NUT (USE WITH INDEX 25)	1		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

Figure 1. No. 2 Fuel Tank Wash Filter (5FAP632) (Sheet 6)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****NO. 2 FUEL TANK WASH FILTER (5FAP632)****ENGINE FUEL SUPPLY SYSTEM**

**EFFECTIVITY: 161716 THRU 161761 BEFORE F/A-18
AFC 18 AND F/A-18 AFC 53**

Reference Material

Fuel System	A1-F18AC-460-300
No. 2 Fuel Tank Access Cover	WP005 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
No. 2 Fuel Tank Cycle Test	WP012 04
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required (Cont)

Materials Required		Materials Required (Cont)	
Nomenclature	Specification or Part Number	Nomenclature	Specification or Part Number
Packing (2)	MS29512-06	Packing (4)	MS29513-222
		Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove cover (1, figure 1) and attaching parts.
- c. Disconnect tubes (2, 5, and 16, detail A).
- d. Remove bolt (12), clamps (6 and 10), spacer (7), and attaching parts.
- e. Remove clamp (11) and attaching parts.
- f. Remove couplings (9), packings (8), and wash filter (15).
- g. Loosen nuts and remove tee (4), elbow (17), and packings (3).

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings with petrolatum.
- c. Install packings (3 and 8, figure 1, detail A).
- d. Prepare mating surfaces of wash filter (15), bulkhead connector/retainer, tee (4), tube (5), clamp (11), and attaching parts for electrical bond (A1-F18AC-LMM-000).
- e. Install tee (4) and elbow (17). Tighten nuts handtight.

- f. Prepare mating surfaces of clamp (11) and bracket (13) for electrical bond (A1-F18AC-LMM-000).

- g. Position wash filter (15) and install forward coupling (9).

- h. Install clamp (11) and attaching parts.

- i. Install aft coupling (9).

- j. Connect tubes (2, 5, and 16).

- k. Tighten nuts to elbow (17) and tee (4).

- l. Install clamps (6 and 10), bolt (12), spacer (7), and attaching parts.

- m. Prepare mating surfaces of cover (1, figure 1) bolt and baffle for electrical bond (A1-F18AC-LMM-000).

- n. Position cover (1) and install attaching parts.

- o. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)

- p. Install no. 2 fuel tank access cover (WP005 00).

- q. Connect utility and emergency battery connectors (WP013 00).

- r. Do no. 2 fuel tank cycle test (A1-F18AC-460-200, WP012 04).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

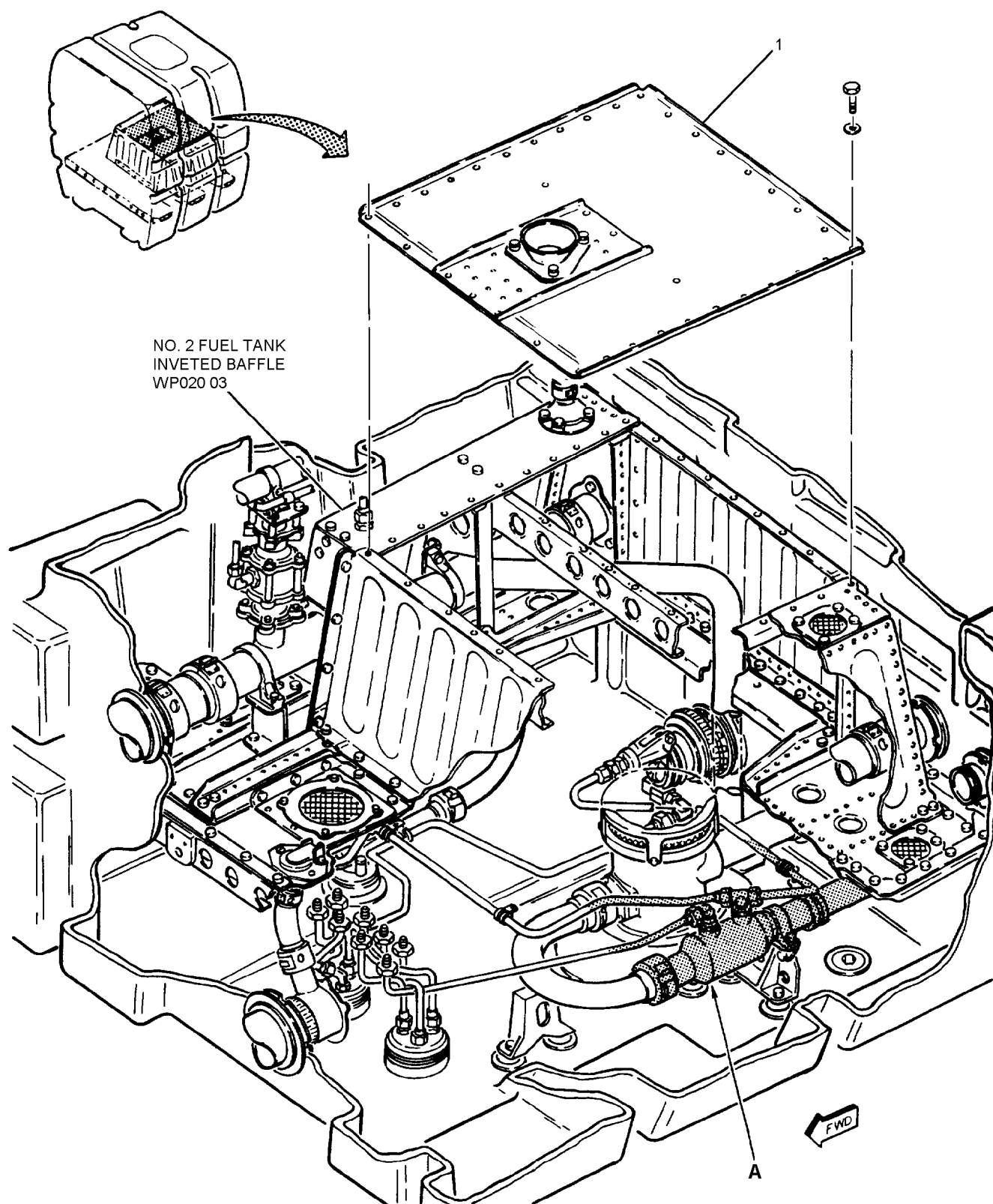


Figure 1. No. 2 Fuel Tank Wash Filter (5FAP632) (Sheet 1)

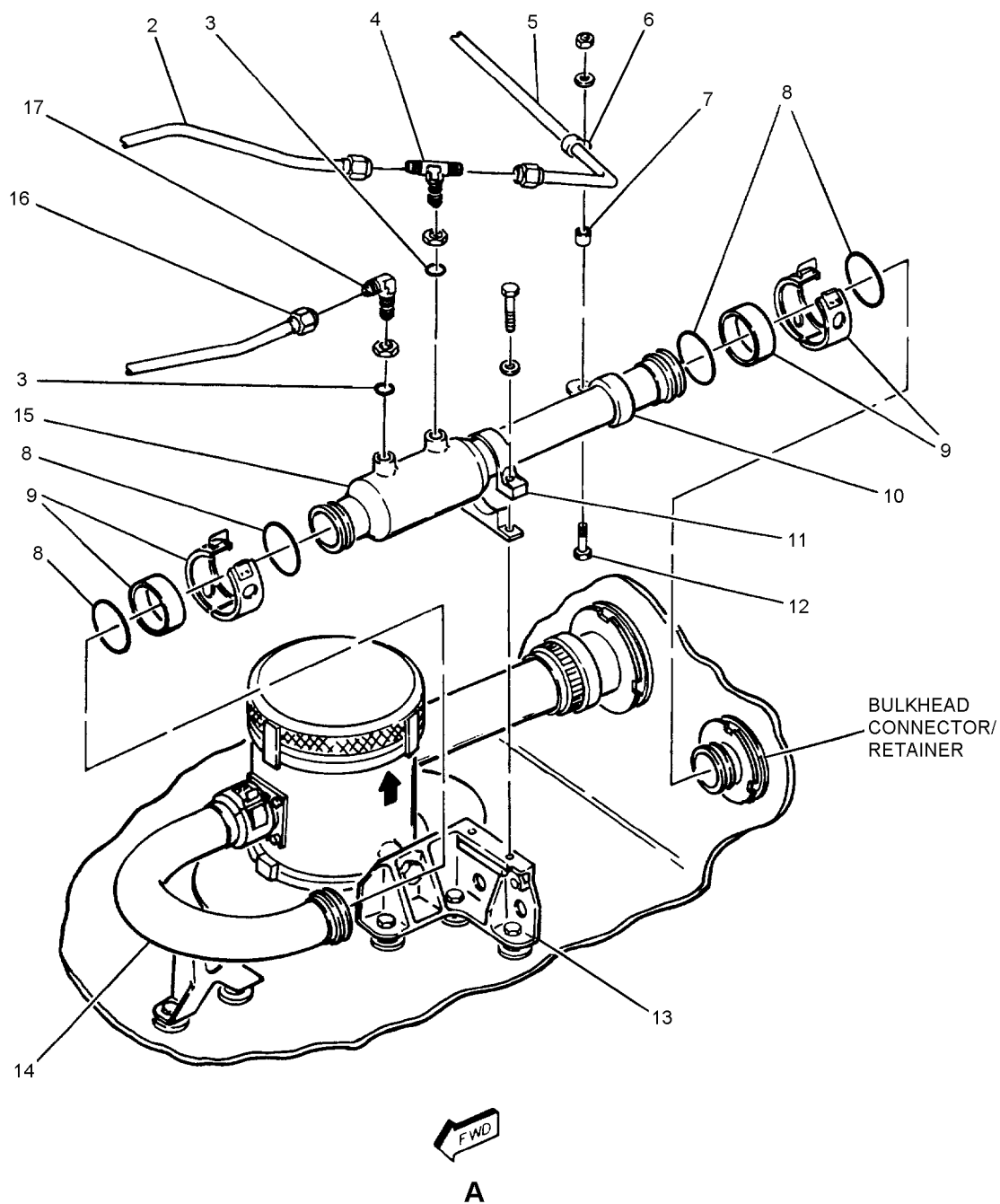


Figure 1. No. 2 Fuel Tank Wash Filter (5FAP632) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 2 FUEL TANK WASH FILTER (5FAP632)			
1	74A586247-1029	. COVER (76301) (FOR REPAIR SEE WP020 05)	1		XBOOO
	NAS673V4	. BOLT (AP)	39		PAOZZ
	AN960JD10L	. WASHER (AP)	39		PAOZZ
2	74A586274-1003	. TUBE ASSEMBLY METAL - SCAV MOTIVE FL, Y406 TEE - Y397 PUMP (76301)	1		MGOZZ
3	MS29512-06	. PACKING	2		PAOZZ
4	7M637BX-6D	. TEE (76301)	1		PAOZZ
	AN924-6D	. NUT (USE WITH INDEX 4)	1		PAOZZ
5	74A586827-1003	. TUBE ASSEMBLY METAL - PRESS FILTER TEE - Y410, VALVE TEE (76301)	1		MGOZZ
6	MS25281-R6	. CLAMP (SUPERSEDES MS25281-6)	1		PAOZZ
7	NAS43DD3-48	. SPACER	1		PAOZZ
8	MS29513-222	. PACKING	4		PAOZZ
9	W901K24DE	. COUPLING, CLAMP GROOVED (79326) (MCDONNELL SPEC 7M765-24D) (INCLUDES SLEEVE)	2		PAOZZ
	14J12-24A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-24D) (INCLUDES SLEEVE)	2		PAOZZ
	W901F24DE	. COUPLING, CLAMP GROOVED (79326) (MCDONNELL SPEC 7M550-24D) (INCLUDES SLEEVE)	2	*	PAOZZ
10	MS25281-R24	. CLAMP (SUPERSEDES MS25281-24)	1		PAOZZ
11	NAS1787A24G	. CLAMP	1		PAOZZ
	NAS673V5	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
12	NAS673V2	. BOLT	1		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 12)	1		PAOZZ
	NAS43DD3-48	. NUT (USE WITH INDEX 12)	1		PAOZZ
13	74A586666-1003	. SUPPORT, FUEL PUMP - MAIN EJECTOR, TANK NO. 2 (76301)	1		XBOGG
14	74A586269-1003	. TUBE ASSEMBLY, METAL - FUEL BOOST PUMP, MOTIVE FL TK NO. 2 (76301)	1		XBOZZ
15	74A586268-1003	. FILTER FLUID PRESSURE - FUEL WASH (NO. 2 FUEL TANK WASH FILTER) (76301) (5FAP632)	1		PAOZZ
16	74A586275-1009	. TUBE ASSEMBLY METAL - PRESS SENSOR 403 ELB - Y387/Z103 UN (76301) (SUPERSEDES 74A586275-1005 AND 74A586275-1007)	1		MGOZZ
17	7M637BW-6D	. ELBOW TUBE (76301)	1		PAOZZ
	AN924-6D	. NUT (USE WITH INDEX 17)	1		PAOZZ
* ALTERNATE OR EQUIVALENT PARTS. (WP002 00)					

Figure 1. No. 2 Fuel Tank Wash Filter (5FAP632) (Sheet 3)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****NO. 2 FUEL TANK WASH FILTER (5FAP632)****ENGINE FUEL SUPPLY SYSTEM**

**EFFECTIVITY: 161924 AND UP; ALSO 161353 THRU 161761 AFTER
F/A-18 AFC 18 AND F/A-18 AFC 53**

Reference Material

Fuel System	A1-F18AC-460-300
No. 2 Fuel Tank Access Cover	WP005 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
No. 2 Fuel Tank Cycle Test	WP012 04
Line Maintenance Procedures	A1-F18AC-LMM-000

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Removal	2

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 18	-	Incorporation of Fuel Turbine Boost Pump/ Sealing of Raised Baffle in Fuel Tanks 2 and 3 (ECP MDA-F/A-18-00077C1/C2)	15 Jul 86	-
F/A-18 AFC 53	-	Elimination of Tanks 1 and 4 Sneak Circuit, Tank 4 Motive Flow Shut Off Valve, and Raised Inverted Baffle (ECP MDA-F/ A-18-00055/C1)	15 Jul 86	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (2)	MS29512-06
Packing (4)	MS29513-222
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove cover (1, figure 1) and attaching parts.
- c. Disconnect tubes (2, 3, and 5, detail A).
- d. Remove clamps (4 and 9) and attaching parts.
- e. Remove clamp (10) and attaching parts.
- f. Remove couplings (8), packings (7), and wash filter (11).
- g. Loosen nuts and remove tee (14), elbow (13), and attaching parts.

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings with petrolatum.

- c. Prepare mating surfaces of wash filter (11, figure 1, detail A), tee (14), tube (5), bulkhead retainer, clamp (10), and attaching parts for electrical bond (A1-F18AC-LMM-000).

- d. Install packings (7) nuts, tee (14), and elbow (13) in wash filter (11).

- e. Position wash filter (11) and install forward coupling (8) with packings (7).

- f. Install clamp (10) and attaching parts.

- g. Install aft coupling (8) with packings (7).

- h. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)

- i. Connect tubes (2, 3, and 5).

- j. Tighten nuts to elbow (13) and tee (14).

- k. Install clamps (4 and 9), bolt, spacer, and attaching parts.

- l. Prepare mating surfaces of cover (1) bolt and baffle for electrical bond (A1-F18AC-LMM-000).

- m. Position cover (1, figure 1) and install attaching parts.

- n. Install no. 2 fuel tank access cover (WP005 00).

- o. Do no. 2 fuel tank cycle test (A1-F18AC-460-200, WP012 04).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

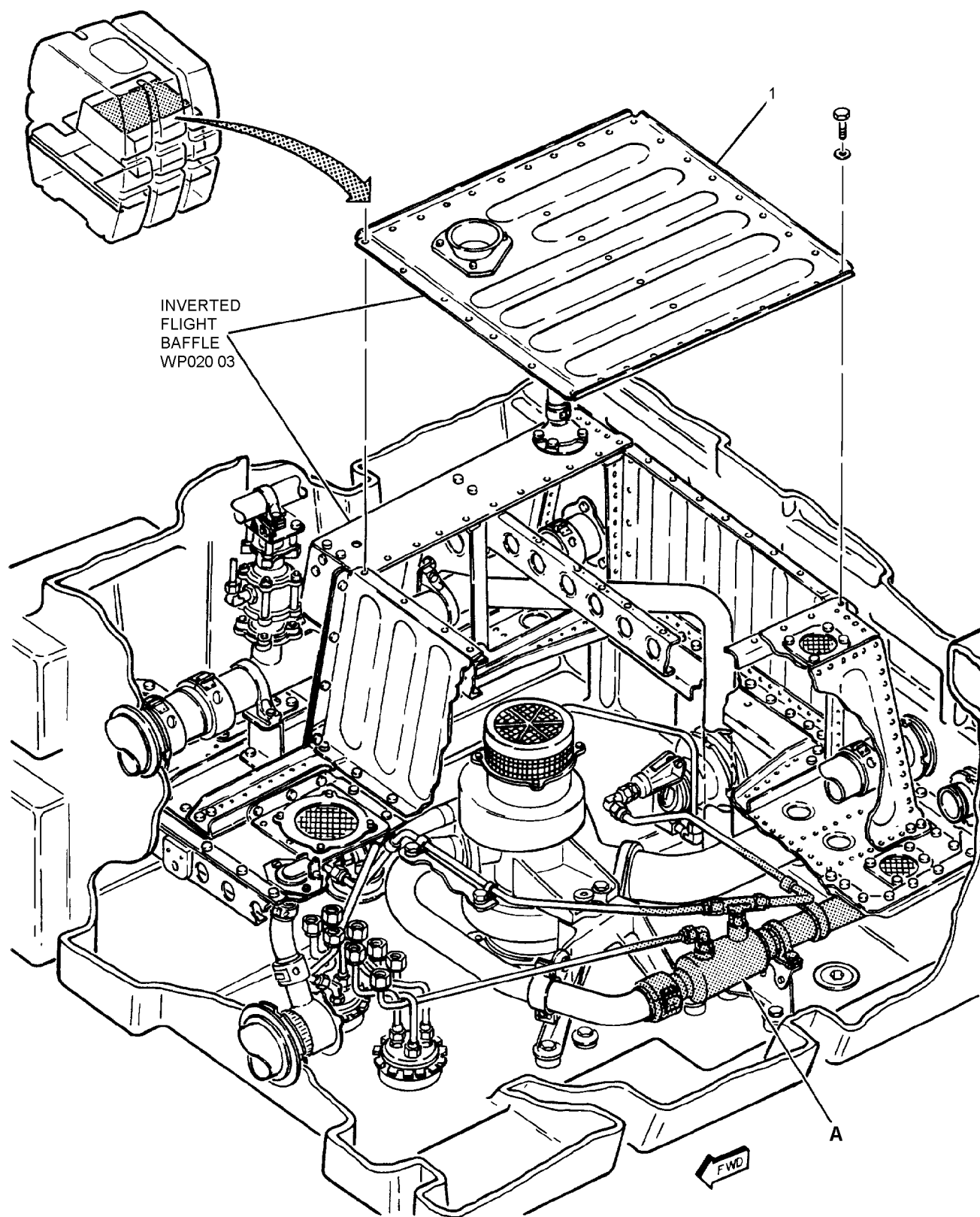


Figure 1. No. 2 Fuel Tank Wash Filter (5FAP632) (Sheet 1)

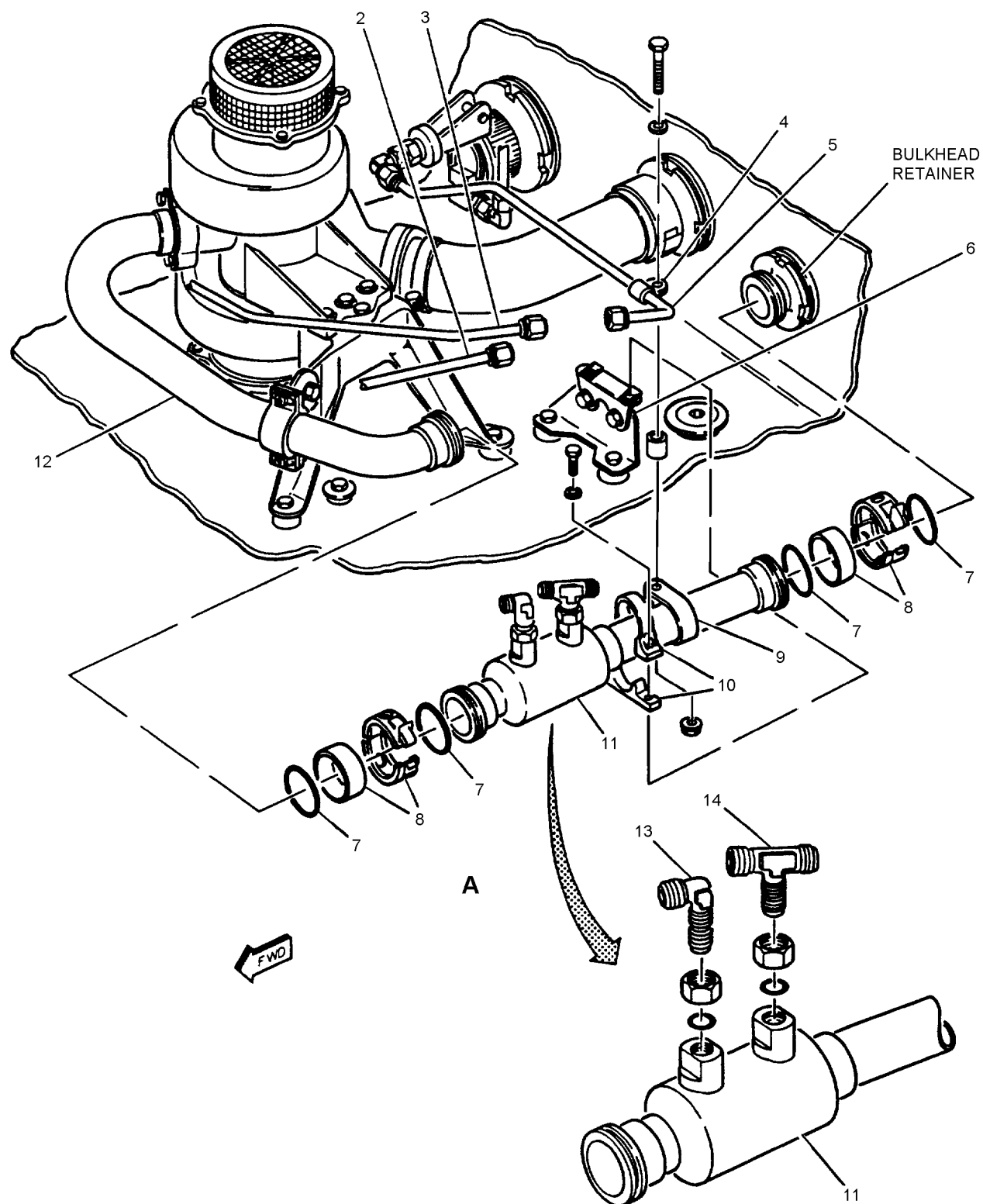


Figure 1. No. 2 Fuel Tank Wash Filter (5FAP632) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 2 FUEL TANK WASH FILTER (5FAP632)			
1	74A586247-1049	. COVER ASSY (76301) (FOR REPAIR	1		XB000
		SEE WP020 05)			
	NAS673V4	. BOLT (AP)	39		PAOZZ
	AN960JD10L	. WASHER (AP)	39		PAOZZ
2	74A586275-1009	. TUBE ASSEMBLY, METAL - PRESS SENSOR	1		MGOZZ
		403 ELB-Y387/Z123 UN (76301)			
		(SUPERSEDES 74A586275-1005 AND			
		74A586275-1007)			
3	74A587103-1005	. TUBE ASSEMBLY METAL - SCAV MOTIVE	1		MGOZZ
		FLOW Y406 TEE - Y397 (76301)			
		(SUPERSEDES 74A587103-1003)			
4	MS25281-R6	. CLAMP (SUPERSEDES MS25281-6)	1		PAOZZ
5	74A587105-1005	. TUBE ASSEMBLY, METAL - SCAV MOTIVE	1		MGOZZ
		FLOW Y406 - Y397 PUMP (76301)			
		(SUPERSEDES 74A587105-1001 AND			
		74A587105-1003)			
6	74A586244-2045	. ANGLE (76301)	1		XBOZZ
	A11144-7-3	. NUT CLIP (72962) (MCDONNELL SPEC	2	*	PAOZZ
		ST3M523C3M) (USE WITH INDEX 6)			
	130091	. SAME AS ABOVE (76530)	2	*	PAOZZ
7	MS29513-222	. PACKING	4		PAOZZ
8	W901K24DE	. COUPLING CLAMP GROOVED (76326)	2		PAOZZ
		(MCDONNELL SPEC 7M765-24D)			
		(INCLUDES SLEEVE)			
	14J12-24A	. SEE ABOVE (24984)	2		PAOZZ
	W901F24DE	. SEE ABOVE (79326) (MCDONNELL SPEC	2	*	PAOZZ
		7M550-24D)			
9	M525281-R24	. CLAMP (SUPERSEDES MS25281-24)	1		PAOZZ
	NAS673V15	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
	NAS43DD3-48	. SPACER (AP)	1		PAOZZ
	NAS1291C3M	. NUT (AP)	1		PAOZZ
10	NAS1787A24G	. CLAMP	1		PAOZZ
	NAS673V5	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
11	74A586268-1003	. FILTER, FLUID PRESSURE - FUEL WASH	1		PAOZZ
		(NO. 2 FUEL TANK WASH FILTER)			
		(76301) (5FAP632)			
12	74A587102-1005	. TUBE ASSEMBLY METAL - TURBO DRIVE	1		XBOZZ
		FUEL TURBO PUMP, TANK 2 (76301)			
		(SUPERSEDES 74A587102-1001 &			
		74A587102-1003)			
13	7M637BW-6D	. ELBOW (76301)	1		PAOZZ
	AN924-6D	. NUT (USE WITH INDEX 13)	1		PAOZZ
	MS29512-06	. PACKING (USE WITH INDEX 13)	1		PAOZZ
14	7M637BX-6D	. TEE (76301)	1		PAOZZ
	AN924-6D	. NUT (USE WITH INDEX 14)	1		PAOZZ
	MS29512-06	. PACKING (USE WITH INDEX 14)	1		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

Figure 1. No. 2 Fuel Tank Wash Filter (5FAP632) (Sheet 3)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 3 FUEL TANK WASH FILTER (5FAP633)

ENGINE FUEL SUPPLY SYSTEM

Title	WP Number
No. 3 Fuel Tank Wash Filter - 161353 THRU 161715 BEFORE F/A-18 AFC 18 AND F/A-18 AFC 53	132 01
No. 3 Fuel Tank Wash Filter - 161716 THRU 161761 BEFORE F/A-18 AFC 18 AND F/A-18 AFC 53	132 02
No. 3 Fuel Tank Wash Filter - 161924 AND UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 18 AND F/A-18 AFC 53	132 03

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 3 FUEL TANK WASH FILTER (5FAP633)

ENGINE FUEL SUPPLY SYSTEM

EFFECTIVITY: 161353 THRU 161715 BEFORE F/A-18 AFC 18
AND F/A-18 AFC 53

Reference Material

Fuel System	A1-F18AC-460-300
No. 3 Fuel Tank Access Cover	WP006 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer and Engine Fuel Supply System	WP012 00
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required (Cont)

Materials Required		Nomenclature	Specification or Part Number
Nomenclature	Specification or Part Number	Packing (2)	MS29513-230
		Petrolatum, Technical	VV-P-236 (CAGE 81348)
		1. REMOVAL.	
Packing (2)	MS29512-06	a. Do general preparation for removal (WP013 00).	
Packing (5)	MS29513-222	b. Remove tube (1, figure 1, detail A), coupling	
Packing (5)	MS29513-226	(3), and packings (2).	

- c. Disconnect tube (11, detail B).
- d. Disconnect clamps (14, 18, and 19) and attaching parts.
- e. Remove bolts (9), couplings (6), manifold (8) and tube (7), and packings (5).
- f. Remove guide (20) and attaching parts.
- g. Disconnect tube (15, detail C).
- h. Remove and loosen bolts (25 and 29, detail C and detail D) and washers as required to remove webs (26, 28, and 33) and retainers (23 and 24).
- i. Disconnect tubes (45 and 51, detail E).
- j. Remove bolts (49) and washers and clamps (50).
- k. Remove coupling (56) and packings (41) from ejector (54).
- l. Remove coupling (48), packing (41), and tube (40) with wash filter (42).
- m. Remove coupling (56) and tube (40) and packings (41) from wash filter.
- n. Remove elbow (46) and nipple (52) and packings (43).

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

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- b. Lubricate new packings with petrolatum.
- c. Install nut (44, figure 1, detail E), packing (43), and elbow (46) in wash filter (42).
- d. Install packings (43) and nipple (52).
- e. Install packings (41) and install tube (40) and coupling (56) on wash filter (42).

- f. Position washer filter (42) with tube (40) below baffle, then connect tubes (45 and 51).
 - g. Install couplings (56 and 48).
 - h. Prepare mating surfaces of clamps (50) and supports for electrical bond (A1-F18AC-LMM-000).
 - i. Install clamps (50) and bolts (49) and washers.
 - j. Inspect for and remove any foreign objects from below baffle area. (QA)
 - k. Position web (33, detail C and detail D), then position web (28) over web (26). Install and tighten bolts (25 and 29) and washers as required.
 - l. Position retainer (24) over web (33) and under retainer (36), then install and tighten bolts (29 and 25) and washers as required.
 - m. Connect tube (15).
 - n. Prepare mating surfaces of manifold (8, detail B) and baffle for electrical bond (A1-F18AC-LMM-000).
 - o. Install packings (5, detail B), manifold (8) and tube (7), couplings (6), bolts (9), and washers.
 - p. Connect clamps (14, 18, and 19) and attaching parts.
 - q. Connect tube (11).
 - r. Install packings (2, detail A), coupling (3), and tube (1).
 - s. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)
 - t. Install no. 3 fuel tank access cover (WP006 00).
 - u. Connect both utility and emergency battery connectors (WP013 00).
 - v. Do an internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).
- ## 3. ILLUSTRATED PARTS BREAKDOWN.
4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

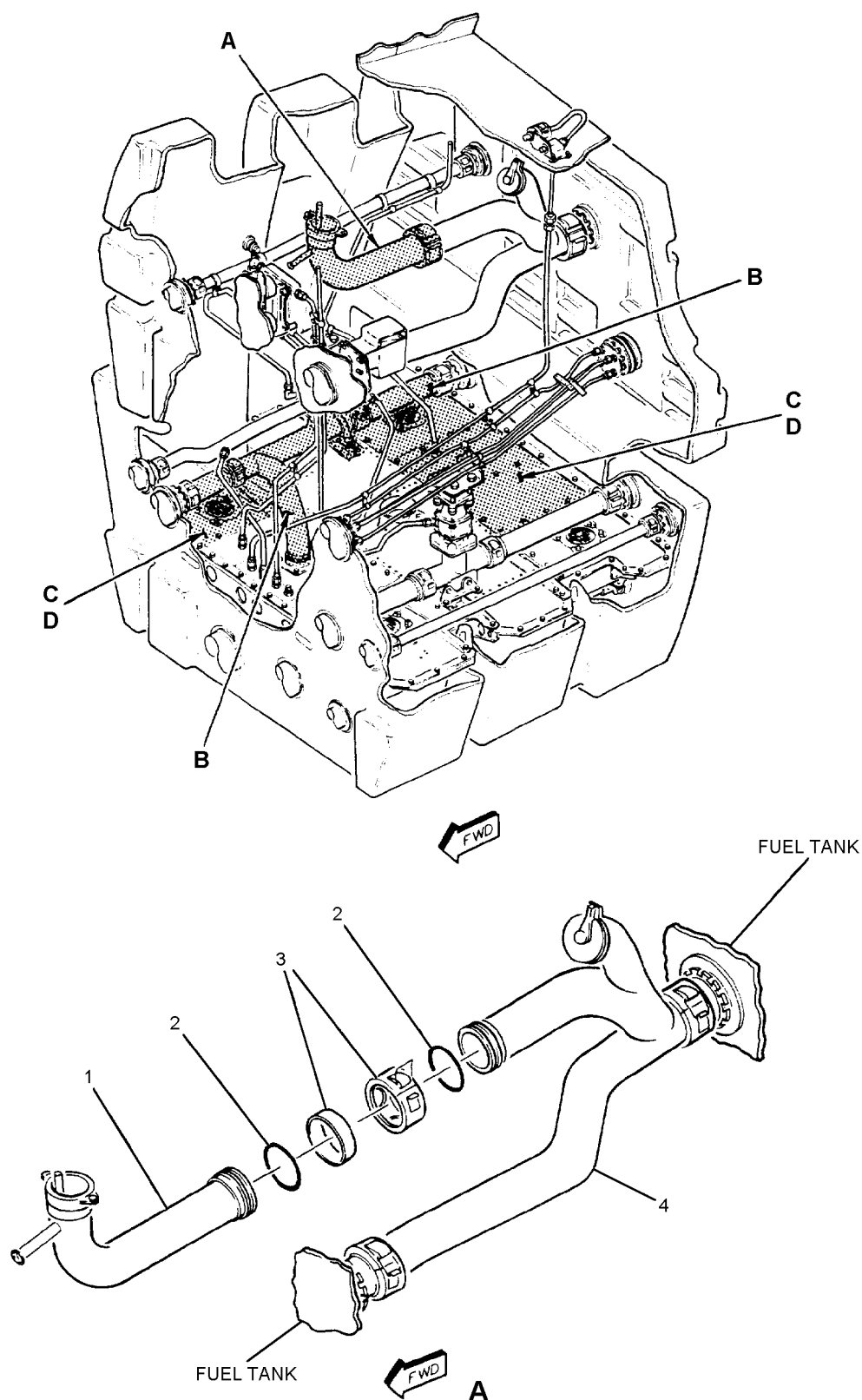


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 1)

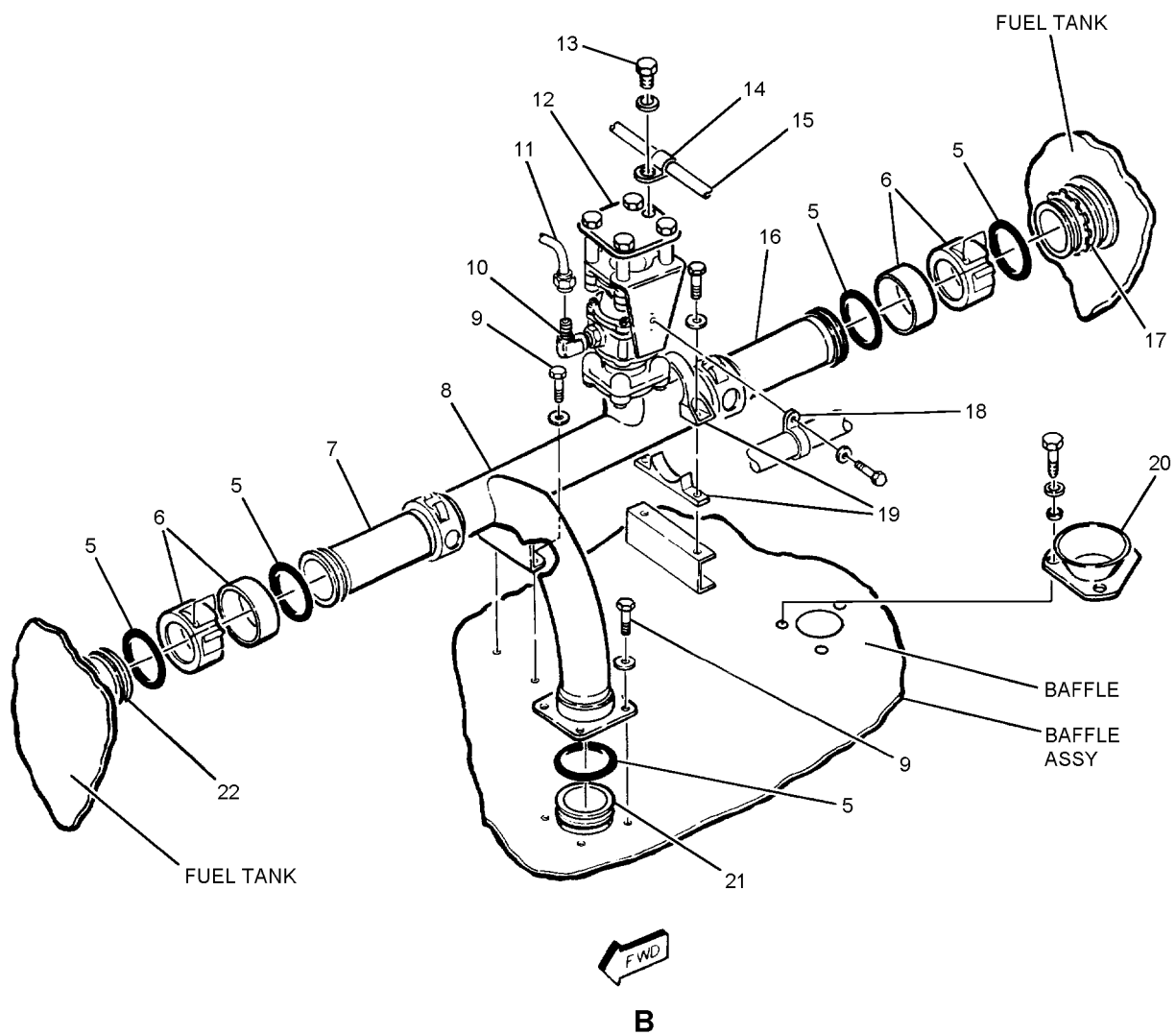


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 2)

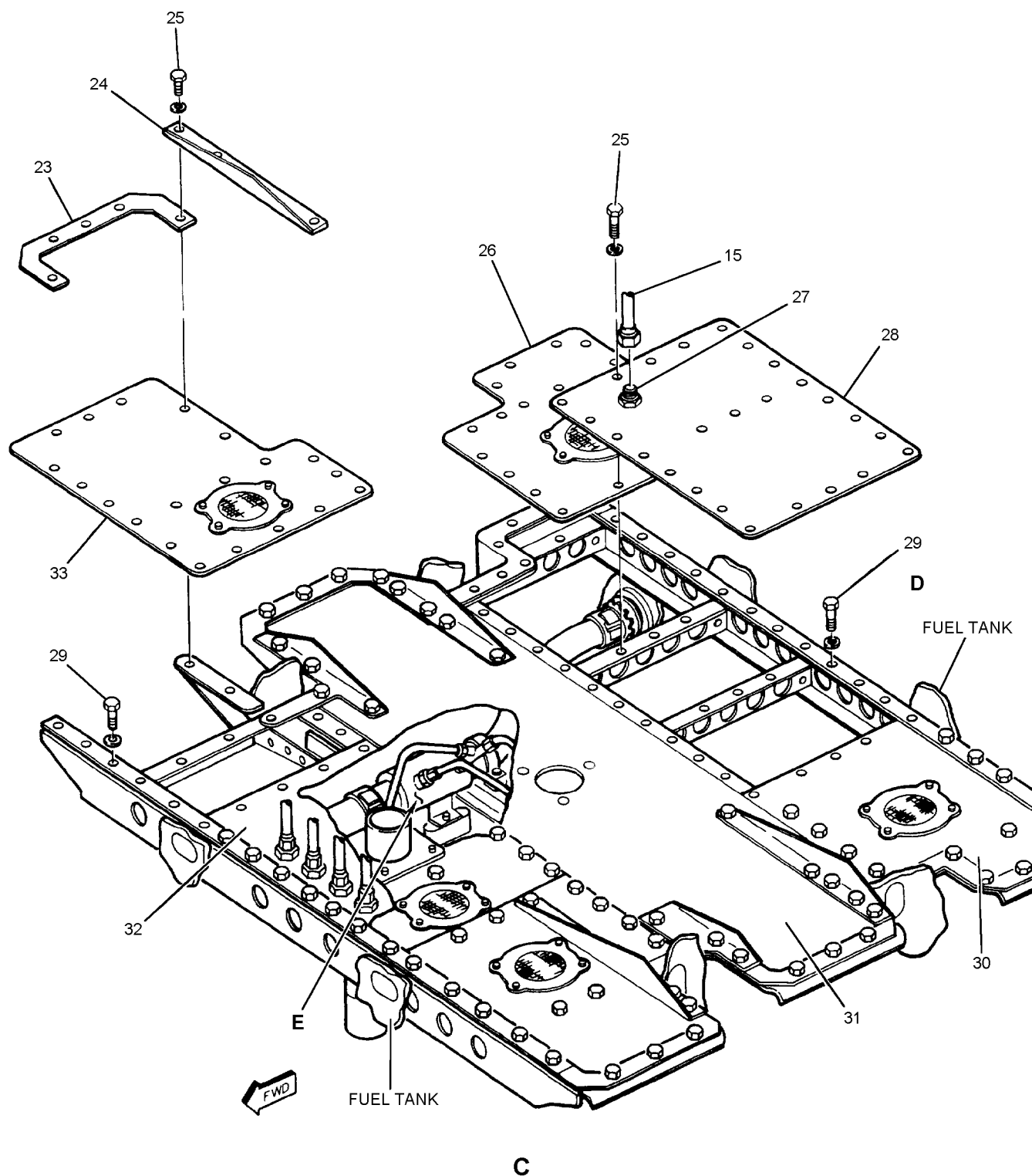


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 3)

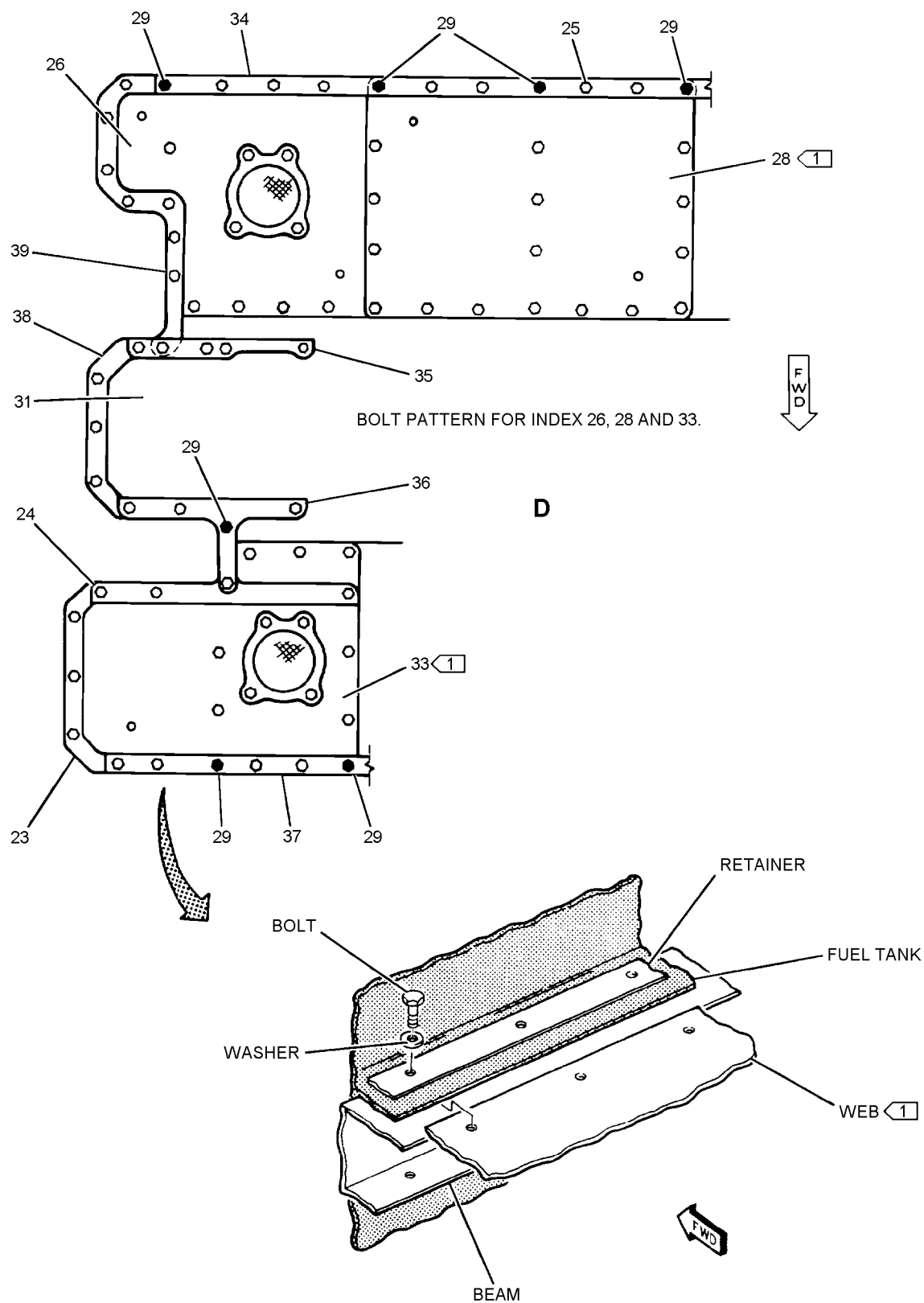
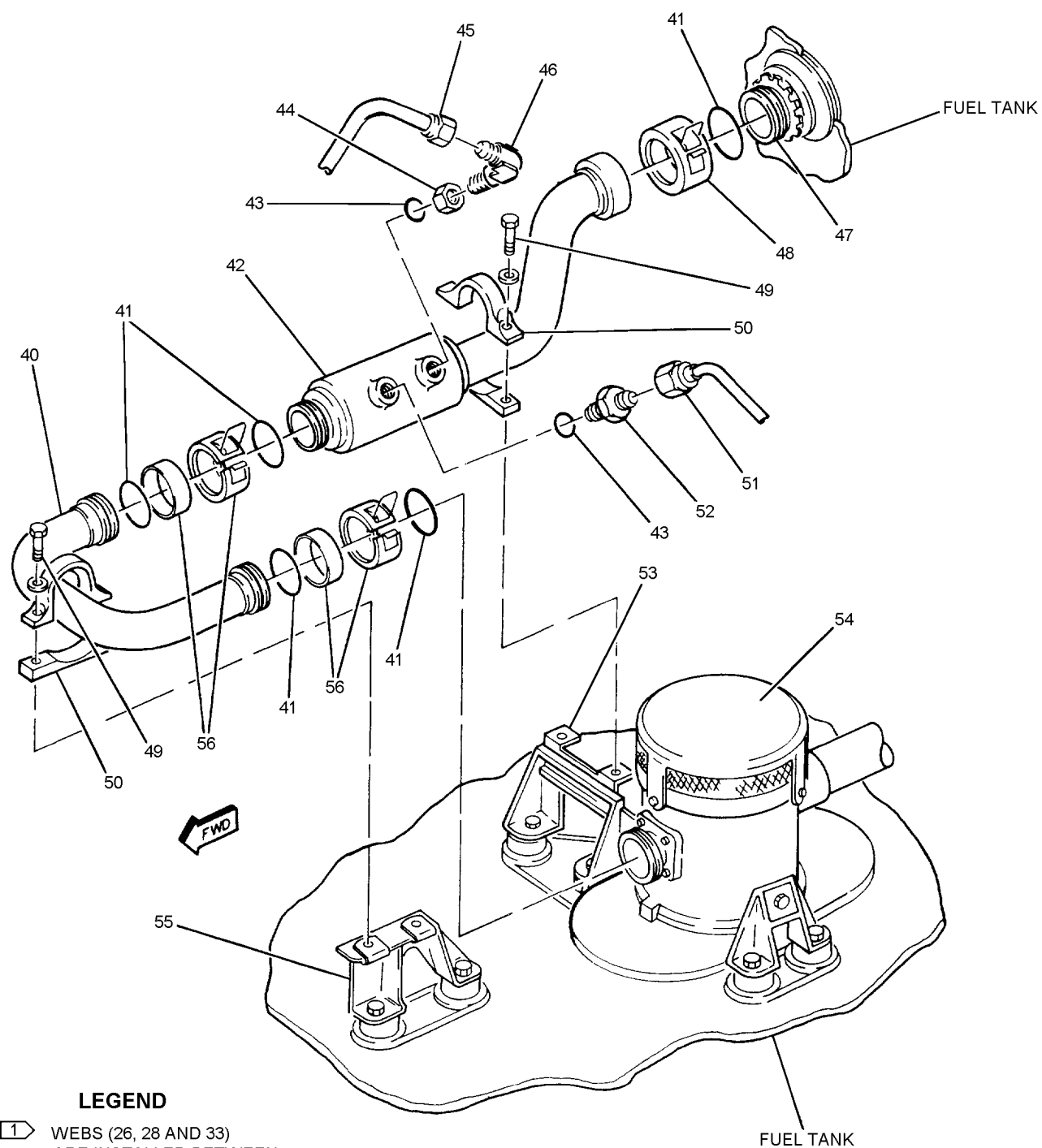


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 4)



E

Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 3 FUEL TANK WASH FILTER (5FAP633)			
1	74A586381-1001	. TUBE ASSY - CLIMB VENT FUEL TANK	1		XBOOO
		NO. 3 (76301)			
	NS103597-02	. NUT SELF-LOCKING, PLATE (80539)	2		PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	F10965-1-3	. SEE ABOVE (72962)	2	*	PAOZZ
	F29339-01-3	. SEE ABOVE (15653)	2	*	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
2	MS29513-230	. PACKING	2		PAOZZ
3	W901K40DE	. COUPLING CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	14J12-40A	. COUPLING, CLAMP, GROOVED (24984)	1		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	W901F40DE	. COUPLING CLAMP GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M550-40D)			
		(INCLUDES SLEEVE)			
4	74A585003-2001	. MAIN VENT ASSEMBLY (NO. 3 FUEL	1		PAOZZ
		TANK DIVE VENT CHECK VALVE)			
		(76301) (5VAP582)			
5	MS29513-226	. PACKING	5		PAOZZ
6	W901K32DE	. COUPLING CLAMP, GROOVED (79326)	2		PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE)			
	14J12-32A	. COUPLING, CLAMP, GROOVED (24984)	2		PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE)			
	W901F32DE	. COUPLING, CLAMP GROOVED (79326)	2	*	PAOZZ
		(MCDONNELL SPEC 7M550-32D)			
		(INCLUDES SLEEVE)			
7	74A586324-1013	. TUBE ASSEMBLY METAL - REFUEL	1		XBOZZ
		SYSTEM TANK NO. 3 (76301)			
		(SUPERSEDES 74A586324-1009)			
8	74A586326-1005	. MANIFOLD DEFUELING - TANK NO. 3	1		XBOZZ
		(76301)			
9	NAS673V2	. BOLT	6		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 9)	6		PAOZZ
10	7M148V6	. ELBOW (76301)	1		PAOZZ
	7M148DA6	. ELBOW (76301)	1	*	PAOZZ
11	74A586341-1005	. TUBE ASSEMBLY, METAL - PILOT VALVE	1		MGOZZ
		RH PORT TO REFUEL V (76301)			
12	74A586309-1021	. DEFLECTOR (76301)	1		XBOZZ
	F50340-3-2	. NUT, SELF-LOCKING, PLATE (15653)	1	*	PAOZZ
		(MCDONNELL SPEC ST3M720C3M2)			
	F12089-2-3	. SEE ABOVE (72962)	1	*	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
13	NAS673V5	. BOLT	1		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 13)	1		PAOZZ
14	MS25281-R6	. CLAMP (SUPERSEDES MS25281-6)	1		PAOZZ
15	74A586314-1001	. TUBE ASSEMBLY METAL - VENT AFT	1		MGOZZ
		INVERTED FLT COMPT TK 3 (76301)			

Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 6)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
16	74A586324-1011	. TUBE ASSEMBLY METAL - PILOT VALVE RH PORT TO REFUEL V (76301) (SUPERSEDES 74A586324-1007)	1		XBOZZ
17	74A586350-2001	. CONNECTOR, TUBE, BULKHEAD FUEL PUMP OUTLET (76301)	1		XBOZZ
18	MS25281-R20	. CLAMP (SUPERSEDES MS25281-20)	1		PAOZZ
	NAS673V5	. BOLT (AP)	1		PAOZZ
	AN960JD10	. WASHER (AP)	1		PAOZZ
19	NAS1787A32G	. CLAMP	1		PAOZZ
	NAS673V9	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
20	74A586297-2001	. GUIDE, PROBE - FUEL QTY TANK 2 & 3 (76301)	1		XBOZZ
	NAS673V4	. BOLT (AP)	3		PAOZZ
	4M36-01016	. WASHER (AP) (76301)	3		PAOZZ
	NAS43DD3-8	. SPACER (AP)	3		PAOZZ
21	74A586327-1007	. TUBE ASSEMBLY METAL - DEFUEL TANK NO. 3 (76301)	1		XBOZZ
22	74A586214-2001	. CONNECTOR TUBE, BULKHEAD - REFUEL LINE, 2.00 DIA, Y419 (76301)	1		XBOZZ
23	74A586303-2421	. RETAINER (RIGHT SIDE) (76301)	1		XBOZZ
24	74A586303-2399	. RETAINER (76301)	1		XBOZZ
25	NAS673V4	. BOLT	AR		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 25)	AR		PAOZZ
26	74A586303-2335	. WEB ASSY (76301) (FOR REPAIR SEE WP024 04)	1		XBOOO
27	7M637BT-6D	. NIPPLE (76301)	1		PAOZZ
28	74A586303-2533	. SKIN ASSY (WEB) (76301)	1		XBOZZ
29	NAS673V6	. BOLT	AR		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 29)	AR		PAOZZ
30	74A586303-2345	. WEB ASSY (76301) (FOR REPAIR SEE WP024 04)	1		XBOOO
31	74A586303-2563	. PANEL ASSY, CENTER (76301) (DOUBLE HINGE) (FOR REPAIR SEE WP024 04)	1		XBOOO
	74A586303-2547	. PANEL ASSY CENTER (76301) (SINGLE HINGE) (FOR REPAIR SEE WP024 04)	1	*	XBOOO
	74A586303-2531	. PANEL ASSY, CENTER (76301) (FOR REPAIR SEE WP024 04)	1	*	XBOOO
32	74A586303-2535	. SKIN ASSY (WEB) (76301) (FOR REPAIR SEE WP024 04)	1		XBOOO
33	74A586303-2339	. WEB ASSY (76301) (FOR REPAIR SEE WP024 04)	1		XBOOO
34	74A586303-2375	. RETAINER (76301)	1		XBOZZ
35	74A586303-2309	. RETAINER (76301)	1		XBOZZ
36	74A586303-2353	. RETAINER (76301)	1		XBOZZ
37	74A586303-2377	. RETAINER (FWD) (76301)	1		XBOZZ
38	74A586303-2369	. RETAINER (RIGHT SIDE) (76301)	1		XBOZZ
39	74A586303-2327	. RETAINER (RIGHT SIDE) (76301)	1		XBOZZ
40	74A586332-1005	. TUBE ASSEMBLY METAL - BOOST PUMP MOTIVE FLOW, TANK NO. 3 (76301)	1		XBOZZ
41	MS29513-222	. PACKING	5		PAOZZ
42	74A586331-1003	. TUBE ASSEMBLY ENGINE BOOST PMP RH MOTIVE FLOW (NO 3 FUEL TANK WASH FILTER) (76301) (5FAP633)	1		PAOZZ

Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 7)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
43	MS29512-06	.						PACKING	2		PAOZZ
44	AN924-6D	.						NUT	1		PAOZZ
45	74A586368-1005	.						TUBE ASSEMBLY METAL - FILTER TEE	1		MGOZZ
								TO Y428 INTERCON VALVE (76301)			
46	7M637BW-6D	.						ELBOW (76301)	1		PAOZZ
47	74A586347-1001	.						CONNECTOR, TUBE, BULKHEAD	1		XBOZZ
								GRAVITY INTERCONNECT Y453 (76301) (5VAP608)			
48	W904K24DE	.						COUPLING CLAMP, GROOVED (HALF)	1		PAOZZ
								(79326) (MCDONNELL SPEC 7M765-24D-1)			
	14C12-24A	.						COUPLING, CLAMP, GROOVED (HALF)	1		PAOZZ
								(24984) (MCDONNELL SPEC 7M765-24D-1)			
	W904F24DE	.						COUPLING CLAMP, GROOVED (HALF)	1	*	PAOZZ
								(79326) (MCDONNELL SPEC 7M550-24D-1)			
49	NA5674V9	.						BOLT	2		PAOZZ
	AN960JD10L	.						WASHER (USE WITH INDEX 49)	2		PAOZZ
50	NA51787A24G	.						CLAMP	2		PAOZZ
51	74A586372-1005	.						TUBE ASSEMBLY, METAL - FILTER Y434.6	1		MGOZZ
								PORT TO Y4221Z103 (76301)			
52	7M637BD-6D	.						NIPPLE (76301)	1		PAOZZ
	AN815-6D	.						NIPPLE	1	*	PAOZZ
53	74A586661-1003	.						SUPPORT, FUEL PUMP - MAIN EJECTOR,	1		XBOZZ
								TANK NO. 3 (76301)			
54	2800099-104	.						EJECTOR JET ENGINE FUEL BOOST	1		PAOZZ
								NO. 3 FUEL TANK ENGINE FUEL BOOST JET EJECTOR) (92003) (MCDONNELL SPEC 74-580112-209) (5BAP591)			
55	74A586663-1001	.						SUPPORT FUEL LINE - MOTIVE FLOW,	1		XBOOO
								TANK NO 3 (76301)			
	MS21062L3	.						NUT PLATE (USE WITH INDEX 55)	2		PAOZZ
	M520426AD3 #	.						RIVET (AP)	2		
56	W901K24DE	.						COUPLING, CLAMP, GROOVED (79326)	2		PAOZZ
								(MCDONNELL SPEC 7M765-24D) (INCLUDES SLEEVE)			
	14J12-24A	.						COUPLING, CLAMP GROOVED (24984)	2		PAOZZ
								(MCDONNELL SPEC 7M765-24D) (INCLUDES SLEEVE)			
	W901F24DE	.						COUPLING, CLAMP, GROOVED (79326)	2	*	PAOZZ
								(MCDONNELL SPEC 7M550-24D) (INCLUDES SLEEVE)			

* ALTERNATE OR EQUIVALENT PARTS
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 8)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 3 FUEL TANK WASH FILTER (5FAP633)

ENGINE FUEL SUPPLY SYSTEM

EFFECTIVITY: 161716 THRU 161761 BEFORE F/A-18
AFC 18 AND F/A-18 AFC 53

Reference Material

Fuel System	A1-F18AC-460-300
No. 3 Fuel Tank Access Cover	WP006 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer and Engine Fuel Supply System	WP012 00
Line Maintenance Procedures	A1-F18AC-LMM-000

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Installation	2
Removal	2

Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required (Cont)

Materials Required		Nomenclature	Specification or Part Number
Nomenclature	Specification or Part Number	Packing (5)	MS29513-222
		Packing (6)	MS29513-226
		Packing (6)	MS29513-230
		Packing	MS29513-330
Packing (2)	MS29512-06	Petrolatum, Technical	VV-P-236
Packing (2)	MS29513-214		(CAGE 81348)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove tube (1, figure 1, detail A), coupling (3), and packings (2).
- c. Remove main vent assembly (4), couplings (3), and packings (2).
- d. Remove probe guide (11, detail B), bolts (12), and attaching parts.
- e. Disconnect tube (10, detail C) and rotate away from work area.
- f. Remove coupling (7), packings (6), disconnect tube (5) and rotate away from work area.
- g. Remove tube (24, detail D).
- h. Remove couplings (14) and tube (15).
- i. Disconnect tube (19) and clamp (25, detail G).
- j. Remove coupling (20, detail D), clamp (17), and manifold (16) with attaching parts.
- k. Carefully remove panel (27, detail E) and attaching parts with defuel valve attached.
- l. Remove panels (28) and attaching parts.
- m. Remove stiffener (29) and attaching parts.
- n. Remove coupling (31, detail F), packings (30), nut assembly (41), packing (42), attaching parts for ejector (40), then remove ejector.
- o. Disconnect tubes (35 and 39).
- p. Remove clamps (38) and attaching parts.
- q. Remove couplings (31), packings (30), and tube (46).
- r. Remove coupling (37), packing (30), and tube with wash filter (32).
- s. Remove elbow (36), nipple (23), and packings (33).

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings with petrolatum.
- c. Prepare mating surfaces of wash filter (32, figure 1, detail F), nut (34), elbow (36), tube (35), and bulkhead connector/retainer for electrical bond (A1-F18AC-LMM-000).
- d. Install nut (34), packing (33), and elbow (36) in wash filter (32). Handtighten nut (34).
- e. Install packing (33) and nipple (23).
- f. Install packings (30).
- g. Position wash filter (32) below baffle.
- h. Install tube (46) and couplings (31 and 37).
- i. Prepare mating surfaces of clamps (38), attaching parts and supports (43, 44, and 45) for electrical bond (A1-F18AC-LMM-000).
- j. Install clamps (38) and attaching parts.
- k. Connect tubes (35 and 39) and tighten nut (34).
- l. Install boost ejector (40) and attaching parts, packing (42), and nut assembly (41). Tighten nut assembly handtight.
- m. Install packings (30) and coupling (31) on ejector (40).
- n. Install stiffener (29, detail E) and attaching parts.
- o. Inspect for and remove any foreign objects from below baffle area. (QA)
- p. Install panel (28) and attaching parts.
- q. Carefully position panel (27) with defuel valve attached and install attaching parts.

r. Prepare mating surfaces of manifold (16, detail D), attaching parts and baffle for electrical bond (A1-F18AC-LMM-000).

s. Position manifold (16) and install packing (13), coupling (20), clamp (17), and attaching parts.

t. Connect tube (19), and connect clamp (25, detail G) to bracket (26) with attaching parts.

u. Position tube (15) and install packings (13) and couplings (14).

v. Install tube (24).

w. Connect tube (10, detail C).

x. Connect tube (5) by installing packing (6) and coupling (7).

y. Install probe guide (11, detail B), bolts (12), and attaching parts.

z. Install packings (2, detail A), coupling (3), and main vent assembly (4).

aa. Install coupling (3), packings (2), and tube (1).

ab. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)

ac. Install no. 3 fuel tank access cover (WP006 00).

ad. Connect both utility and emergency battery connectors (WP013 00).

ae. Do an internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

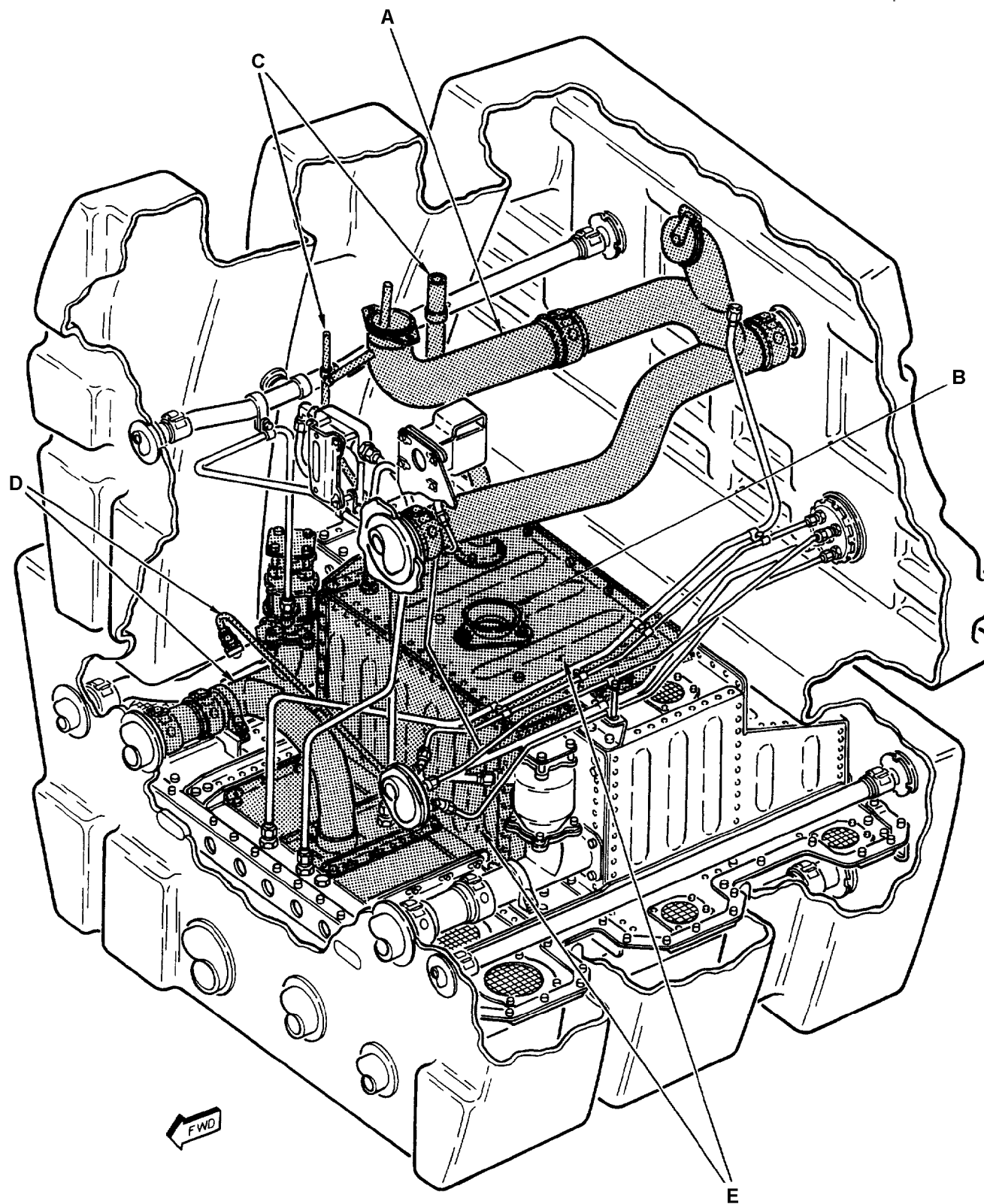


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 1)

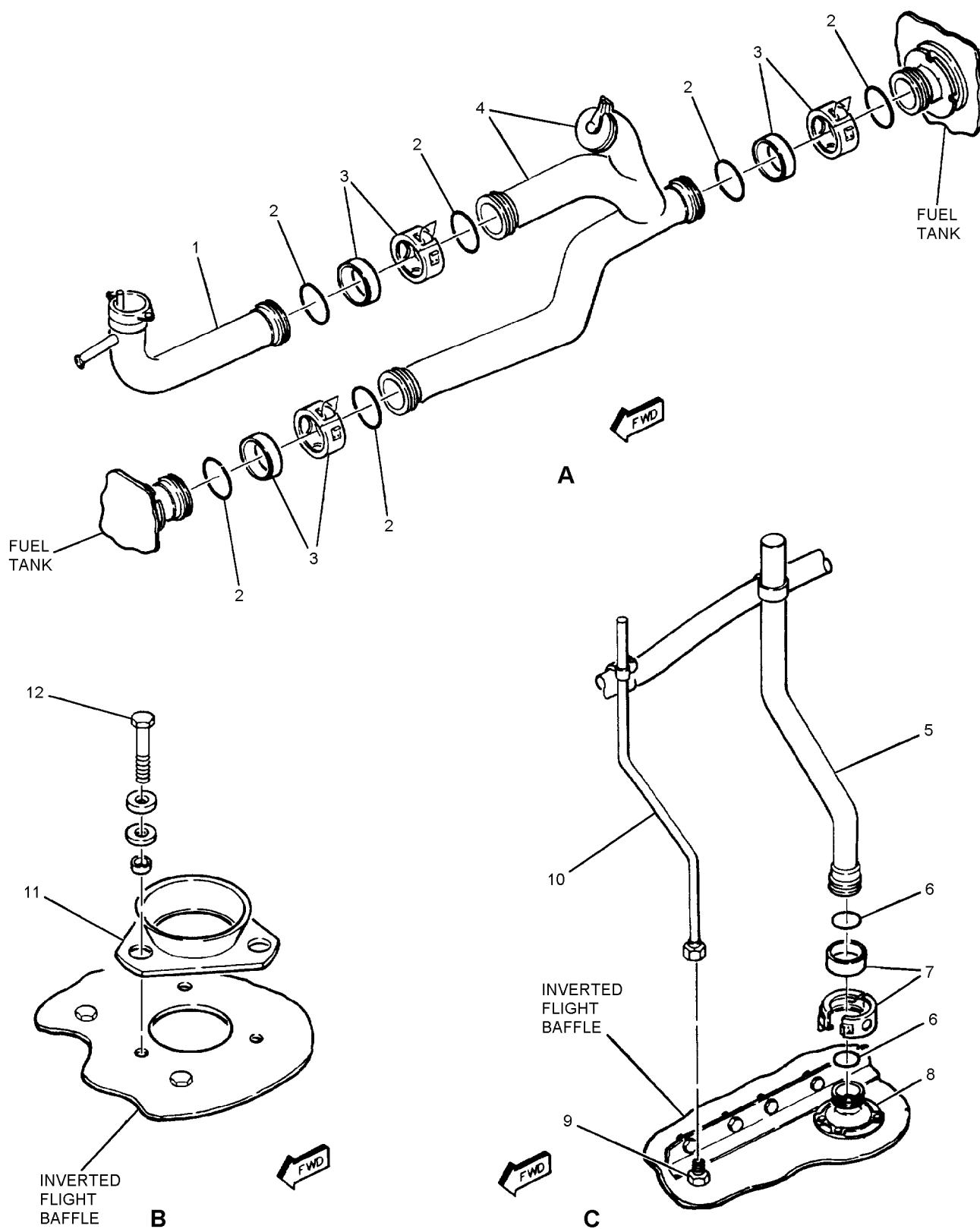


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 2)

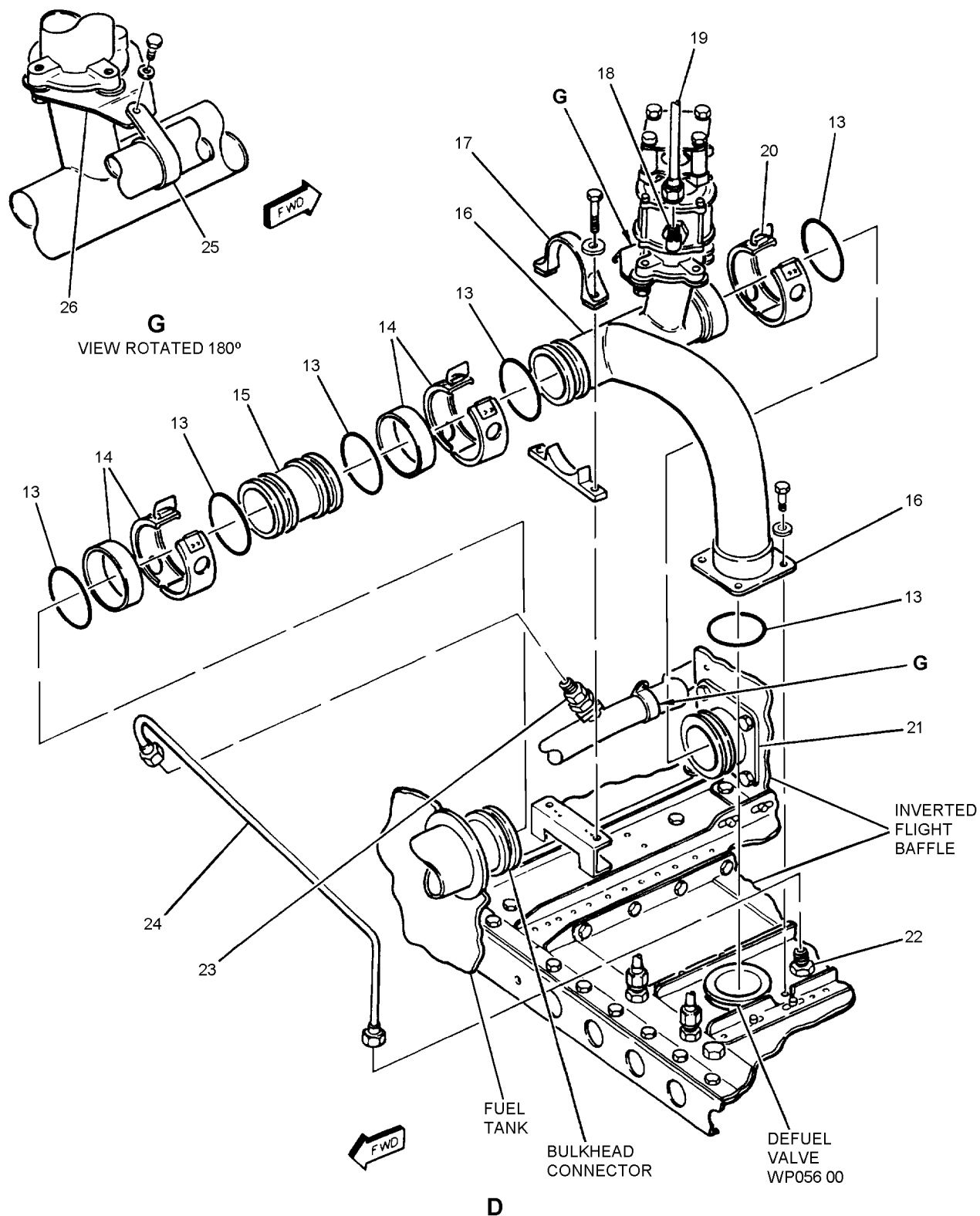


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 3)

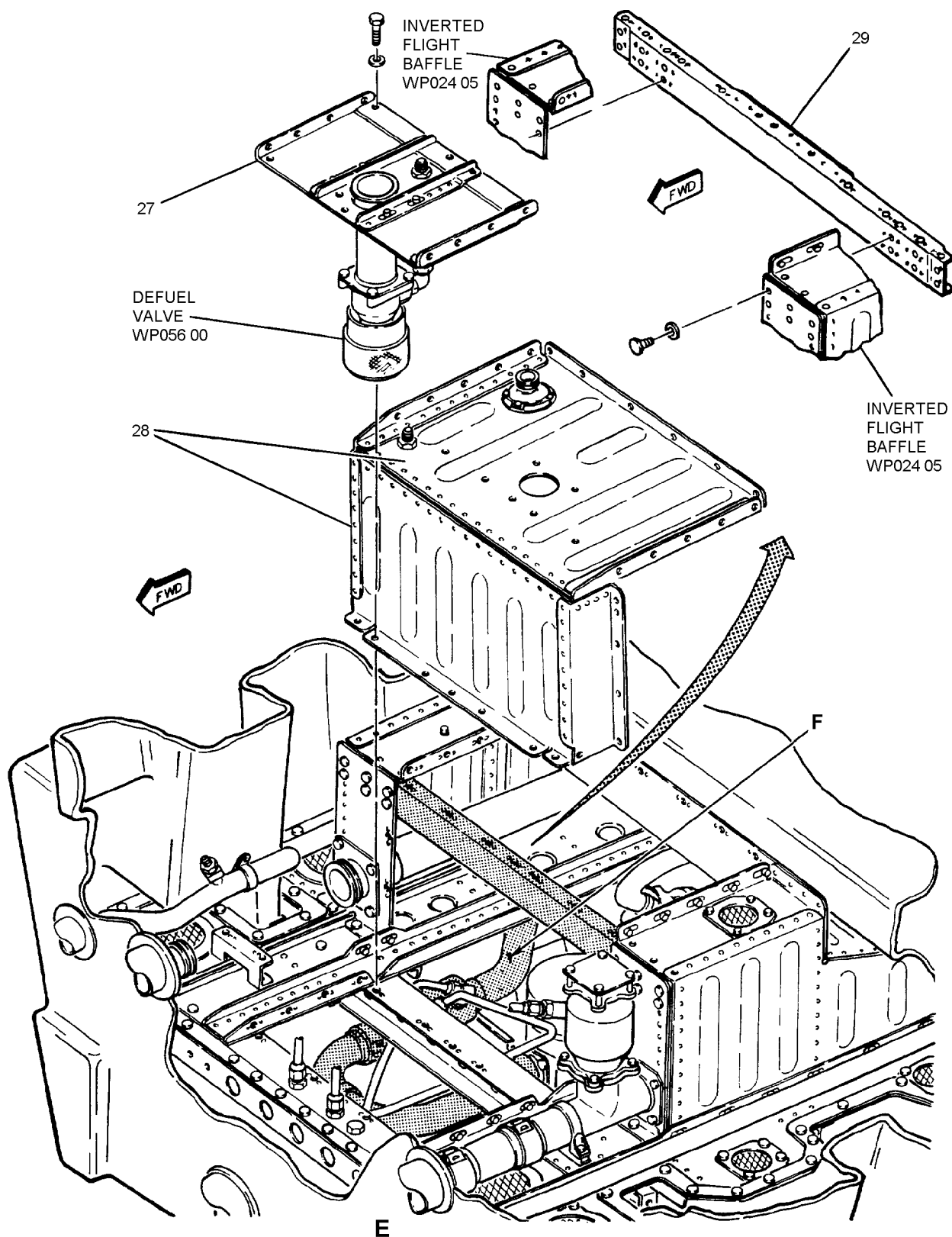


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 4)

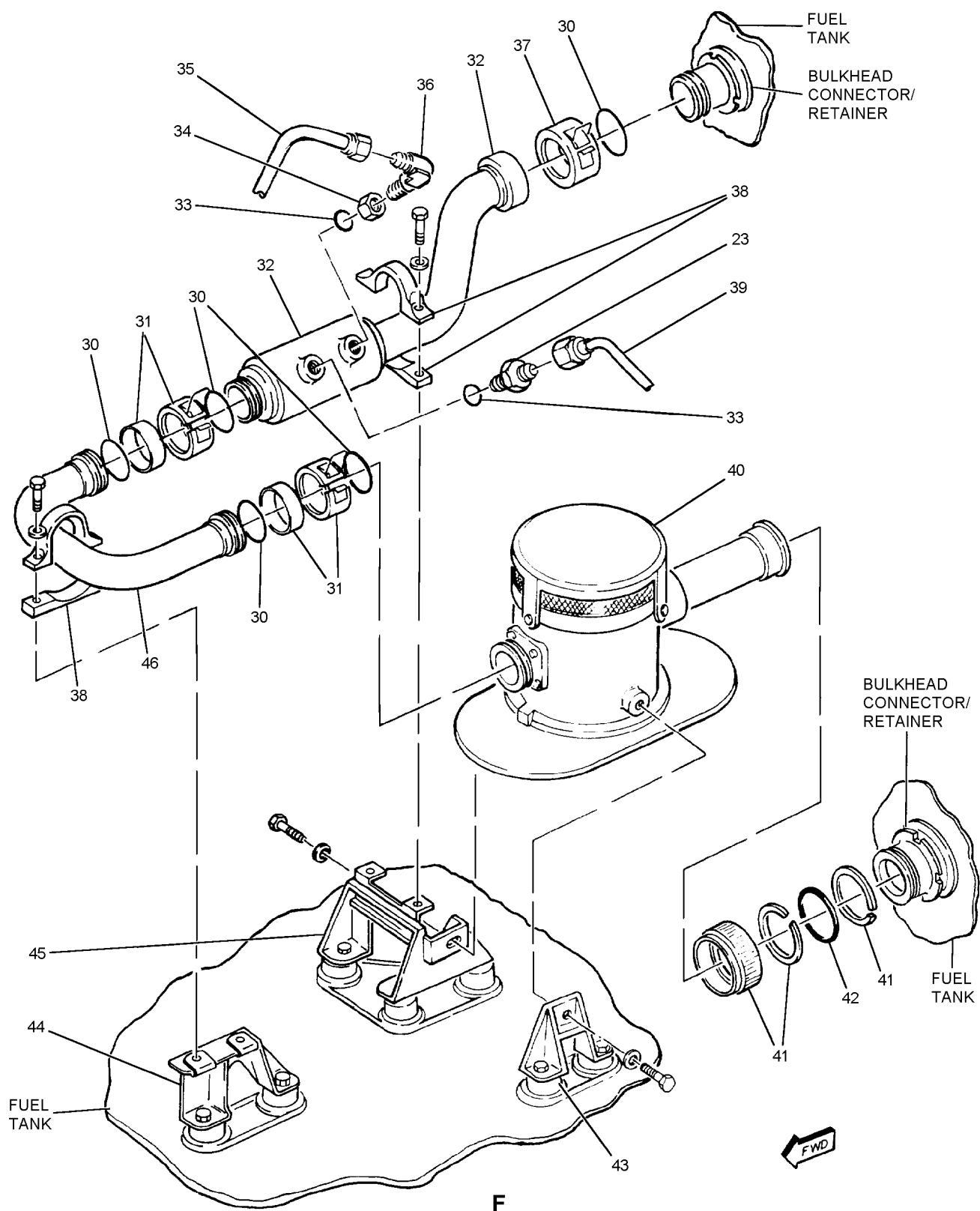


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 3 FUEL TANK WASH FILTER (5FAP633)			
1	74A586381-1001	. TUBE ASSY - CLIMB VENT, FUEL TANK	1		XBOOO
		NO. 3 (76301)			
	NS103597-02	. NUT, SELF-LOCKING, PLATE (80539)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	F10965-1-3	. NUT, SELF-LOCKING, PLATE (72962)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	F29339-01-3	. NUT, SELF-LOCKING, PLATE (15653)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	MS20426AD3 #	. RIVET (AP)	2		-
2	MS29513-230	. PACKING	6		PAOZZ
3	W301K40DE	. COUPLING, CLAMP GROOVED (79326)	3		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	14J12-40A	. COUPLING, CLAMP GROOVED (24984)	3		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	W901F40DE	. COUPLING, CLAMP GROOVED (79326)	3	*	PAOZZ
		(MCDONNELL SYNC 7M550-40D)			
		(INCLUDES SLEEVE)			
4	74A585003-2001	. MAIN VENT ASSEMBLY (NO 3 FUEL TANK	1		PAOZZ
		DIVE VENT CHECK VALVE) (76301)			
		(5VAP582)			
5	74A586314-1005	. TUBE ASSEMBLY METAL - VENT AFT	1		XBOZZ
		INVERTED FLT COMPT, TK 3 (76301)			
6	MS29513-214	. PACKING	2		PAOZZ
7	W901K16DE	. COUPLING. CLAMP GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE)			
	14J12-16A	. COUPLING, CLAMP, GROOVED (24984)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE)			
	W901F16DE	. COUPLING CLAMP GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M550-16D)			
		(INCLUDES SLEEVE)			
8	74A586248-2007	. CONNECTOR, FLANGE (FITTING) (76301)	1		XBOZZ
9	7M637BT-6D	. NIPPLE (76301)	1		PAOZZ
10	74A586313-1005	. TUBE ASSEMBLY METAL - VENT FWD,	1		MGOZZ
		INVERTED FLT COMPT TK 3 (76301)			
11	74A586297-2001	. GUIDE PROBE - FUEL QTY TANK 2 & 3	1		XBOZZ
		(76301)			
12	NAS673V4	. BOLT	3		PAOZZ
	4M36-01016	. WASHER (76301) (USE WITH INDEX 12)	6		PAOZZ
	NAS43DD3-8	. SPACER (USE WITH INDEX 12)	3		PAOZZ
13	MS29513-226	. PACKING	6		PAOZZ
14	W901K32DE	. COUPLING CLAMP, GROOVED (79326)	2		PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE)			

Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 6)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
	14J12-32A	. COUPLING CLAMP GROOVED (24984) (MCDONNELL SPEC 7M765-32D) (INCLUDES SLEEVE)	2		PAOZZ
	W901F32DE	. COUPLING CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-32D) (INCLUDES SLEEVE)	2	*	PAOZZ
15	74A586216-1005	. TUBE ASSEMBLY, METAL - REFUEL, TANK NO. 2 (76301)	1		XBOZZ
16	74A586317-1005	. MANIFOLD, FUEL, AIRCRAFT FUEL TANK NO. 3 (76301) (SUPERSEDES 74A586317-1001)	1		XBOZZ
	NAS673V2	. BOLT (AP)	4		PAOZZ
	AN960JD10L	. WASHER (AP)	4		PAOZZ
17	NAS1787A32G	. CLAMP	1		PAOZZ
	NAS673V9	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
18	7M148V6	. ELBOW (76301)	1		XBOZZ
19	74A586341-1015	. TUBE ASSEMBLY METAL - PILOT VALVE RH PORT TO REFUEL V (76301) (SUPERSEDES 74A586341-1007 AND 74A586341-1011)	1		MGOZZ
20	W904K32DE	. COUPLING CLAMP GROOVED (HALF) (79326) (MCDONNELL SPEC 7M765-32D-1)	1		PAOZZ
	14C12-32A	. COUPLING, CLAMP GROOVED (HALF) (24984) (MCDONNELL SPEC 7M765-32D-1)	1		PAOZZ
	W904F32DE	. COUPLING, CLAMP GROOVED (HALF) (79326) (MCDONNELL SPEC 7M550-32D-1)	1	*	PAOZZ
21	74A586248-2001	. CONNECTOR FLANGE (FITTING) (76301)	1		XBOZZ
	NAS674V3	. BOLT (AP)	4		PAOZZ
	AN960JD416L	. WASHER (AP)	4		PAOZZ
22	7M637BT-6D	. NIPPLE (76301)	1	A	PAOZZ
	7M637BY-6D	. ELBOW (76301)	1	B	PAOZZ
23	7M637BD-6D	. NIPPLE (76301)	2		PAOZZ
	MS29512-06	. PACKING (USE WITH INDEX 23)	1		PAOZZ
24	74A586669-1017	. TUBE ASSEMBLY, METAL - PRESS SENSOR TO DEFUEL LINE, TK 3 (76301) (SUPERSEDES 74A586669-1013)	1		MGOZZ
25	M525281-R20	. CLAMP (SUPERSEDES MS25281-20)	1		PAOZZ
	NAS673V3	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
26	74A586323-1035	. BRACKET ASSY (76301)	1		XBOZZ
	MS21060L3	. NUT, PLATE (USE WITH INDEX 26)	1		PAOZZ
	NAS1079AD3 #	. RIVET (AP)	2		-
27	74A586315-2013	. PANEL ASSY FRONT (76301) (FOR REPAIR SEE WP024 05)	1		XBOOO
	NAS673V4	. BOLT (AP)	AR		PAOZZ
	AN960JD10L	. WASHER (AP)	AR		PAOZZ
28	74A586315-2011	. PANEL ASSY CENTER (76301) FOR REPAIR SEE WP024 05)	1		XBOOO
	NAS673V4	. BOLT (AP)	AR		PAOZZ
	AN960JD10L	. WASHER (AP)	AR		PAOZZ
29	74A586323-1007	. STIFFENER (76301) (FOR REPAIR SEE WP024 05)	1		XBOOO
	NAS673V4	. BOLT (AP)	AR		PAOZZ
	AN960JD10L	. WASHER (AP)	AR		PAOZZ

Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 7)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
30	MS29513-222	.	PACKING	.....					5		PAOZZ
31	W901K24DE	.	COUPLING, CLAMP, GROOVED (79326)	.....					2		PAOZZ
			(MCDONNELL SPEC 7M765-24D)								
			(INCLUDES SLEEVE)								
	14J12-24A	.	COUPLING, CLAMP GROOVED (24984)	.....					2		PAOZZ
			(MCDONNELL SPEC 7M765-24D)								
			(INCLUDES SLEEVE)								
	W901F24DE	.	COUPLING, CLAMP GROOVED (79326)	.....					2	*	PAOZZ
			(MCDONNELL SPEC 7M550-24D)								
			(INCLUDES SLEEVE)								
32	74A586331-1003	.	TUBE ASSEMBLY - ENGINE BOOST PMP	.....					1		PAOZZ
			RH MOTIVE FLOW (NO. 3 FUEL TANK								
			WASH FILTER) (76301) (5FAP633)								
33	MS29512-06	.	PACKING	.....					2		PAOZZ
34	AN924-6D	.	NUT	.....					1		PAOZZ
35	74A586368-1005	.	TUBE ASSEMBLY METAL - FILTER TEE TO	.....					1		MGOZZ
			Y428 INTERCON VALVE (76301)								
36	7M637BW-6D	.	ELBOW (76301)	.....					1		PAOZZ
37	W904K24DE	.	COUPLING, CLAMP, GROOVED (HALF)	.....					1		PAOZZ
			(79326) (MCDONNELL SPEC 7M765-24D-1)								
	14C12-24A	.	COUPLING CLAMP GROOVED (HALF)	.....					1		PAOZZ
			(24984) (MCDONNELL SPEC 7M765-24D-1)								
	W904F24DE	.	COUPLING CLAMP, GROOVED (HALF)	.....					1	*	PAOZZ
			(79326) (MCDONNELL SPEC 7M550-24D-1)								
38	NAS1787A24G	.	CLAMP	.....					2		PAOZZ
	NAS673V9	.	BOLT (AP)	.....					2		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					2		PAOZZ
39	74A586372-1005	.	TUBE ASSEMBLY, METAL - FILTER Y434.6	.....					1		MGOZZ
			PORT TO Y422Z103 UN (76301)								
40	2800099-104	.	EJECTOR JET ENGINE FUEL BOOST (NO. 3	.....					1		PAOZZ
			FUEL TANK ENGINE FUEL BOOST JET								
			EJECTOR) (92003) (MCDONNELL SPEC								
			74-580112-209)								
	NAS674V1	.	BOLT (AP)	.....					2		PAOZZ
	AN960JD416L	.	WASHER (AP)	.....					2		PAOZZ
41	W702-32D	.	NUT ASSEMBLY TUBE COUPLING (79326)	.....					1		PAOZZ
			(MCDONNELL SPEC ST7M291-32D)								
			(INCLUDES NUT AND 2 WASHERS)								
42	M529513-330	.	PACKING	.....					1		PAOZZ
43	74A586662-2005	.	SUPPORT FUEL PUMP - MAIN EJECTOR	.....					1		XBOZZ
			TANK NO. 3 LH (76301)								
44	74A586663-1001	.	SUPPORT, FUEL LINE - MOTIVE FLOW,	.....					1		XBOOO
			TANK NO. 3 (76301)								
	MS21062L3	.	NUT, PLATE (USE WITH INDEX 44)	.....					2		PAOZZ
	MS20426AD3	.	RIVET (AP)	.....					2		-
45	74A586661-1003	.	SUPPORT, FUEL PUMP - MAIN EJECTOR,	.....					1		XBOZZ
			TANK NO. 3 (76301)								
46	74A586332-1005	.	TUBE ASSEMBLY METAL - BOOST PUMP,	.....					1		XBOZZ
			MOTIVE FLOW, TANK NO. 3 (76301)								

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 8)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

CODE	USABLE ON	MODEL
A	161716 THRU 161720	F/A-18A/B
B	161721 THRU 161761	F/A-18A/B

Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 9)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 3 FUEL TANK WASH FILTER (5FAP633)

ENGINE FUEL SUPPLY SYSTEM

EFFECTIVITY: 161924 AND UP; ALSO 161353 THRU 161761 AFTER
F/A-18 AFC 18 AND F/A-18 AFC 53

Reference Material

Fuel System	A1-F18AC-460-300
No. 3 Fuel Tank Access Cover	WP006 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
No. 3 Fuel Tank Cycle Test	WP012 05
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 18	-	Incorporation of Fuel Turbine Boost Pump/ Sealing of Raised Baffle in Fuel Tanks 2 and 3 (ECP MDA-F/A-18-00077C1/C2)	15 Jul 86	-
F/A-18 AFC 53	-	Elimination of Tanks 1 and 4 Sneak Circuit, Tank 4 Motive Flow Shut Off Valve, and Raised Inverted Baffle (ECP MDA-F/ A-18-00056/C1)	15 Jul 86	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (2)	MS29512-06
Packing (2)	MS29513-214
Packing (4)	MS29513-222
Packing (6)	MS29513-226
Packing (6)	MS29513-230
Petrolatum, Technical	VV-P-236 (CAGE 81348)

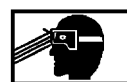
1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove tube (1, figure 1, detail A), coupling (3), and packings (2).
- c. Remove main vent assembly (4), couplings (3), and packings (2).
- d. Remove bolts (9, 10, and 11, detail B) and attaching parts, probe guide (13), and gasket (12).
- e. Remove couplings (7, detail C), packings (6), disconnect tube (5), and rotate away from work area.
- f. Remove tube (25, detail D).
- g. Remove couplings (15), packings (14), and tube (16).
- h. Disconnect tube (20).
- i. Disconnect clamp (26, detail F).
- j. Remove coupling (21, detail D), clamp (18), and manifold (17) with attaching parts.
- k. Carefully remove panel (28, detail E) and attaching parts with defuel valve attached.
- l. Remove panels (29) and attaching parts.
- m. Remove stiffener (30) and attaching parts.

- n. Disconnect tubes (37 and 38, detail G).
- o. Remove clamp (33) and attaching parts.
- p. Remove clamps (48 and 49, detail H), bolt (45), and attaching parts.
- q. Remove coupling (32, detail G), packings (31), bolts (40), and tube (41).
- r. Remove coupling (35), packing (31), and tube with wash filter (34).
- s. Remove elbows (56, detail J) nuts (55), retainers (54), and packings (53).

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

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- b. Lubricate new packings with petrolatum.
- c. Prepare mating surfaces of wash filter (34, figure 1, detail J), nut (55), elbow (56), tube (38, detail G), and bulkhead retainer for electrical bond (A1-F18AC-LMM-000).
- d. Install nuts (55, detail J), retainers (54), packings (53), and elbows (56) in wash filter (34). Hand-tighten nuts (55).
- e. Install packing (31, detail G).
- f. Position wash filter (34) below baffle.
- g. Install wash filter (34) and coupling (35).
- h. Prepare mating surfaces of clamp (33), attaching parts, and angle (39) for electrical bond (A1-F18AC-LMM-000).
- i. Install clamp (33) and attaching parts.
- j. Connect tubes (37 and 38) and tighten nuts (55, detail J).
- k. Install tube (41, detail G), packings (31), coupling (32), bolts (40), and attaching parts.

l. Install clamps (48 and 49, detail H), clamp (42 or 50), bolt (45), and attaching parts.

m. Install stiffener (30, detail E) and attaching parts.

n. Inspect for and remove any foreign objects from below baffle area. (QA)

o. Install panel (29) and attaching parts.

p. Carefully position panel (28) with defuel valve attached and install attaching parts.

q. Prepare mating surfaces of manifold (17, detail D), attaching parts, and baffle for electrical bond (A1-F18AC-LMM-000).

r. Position manifold (17) and install packings (14), coupling (21), clamp (18), and attaching parts.

s. Connect tube (20), and connect clamp (26, detail F) to bracket (27) with attaching parts.

t. Position tube (16, detail D) and install packings (14) and couplings (15).

u. Install tube (25).

v. Connect tube (5, detail C) by installing packings (6) and coupling (7).

w. Install gasket (12, detail B) probe guide (13), bolts (9, 10, and 11) and attaching parts.

x. Install packings (2, detail A), coupling (3), and main vent assembly (4).

y. Install coupling (3), packings (2), and tube (1).

z. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)

aa. Install no. 3 fuel tank access cover (WP006 00).

ab. Connect both utility and emergency battery connectors (WP013 00).

ac. Do no. 3 fuel tank cycle test (A1-F18AC-460-200, WP012 05).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

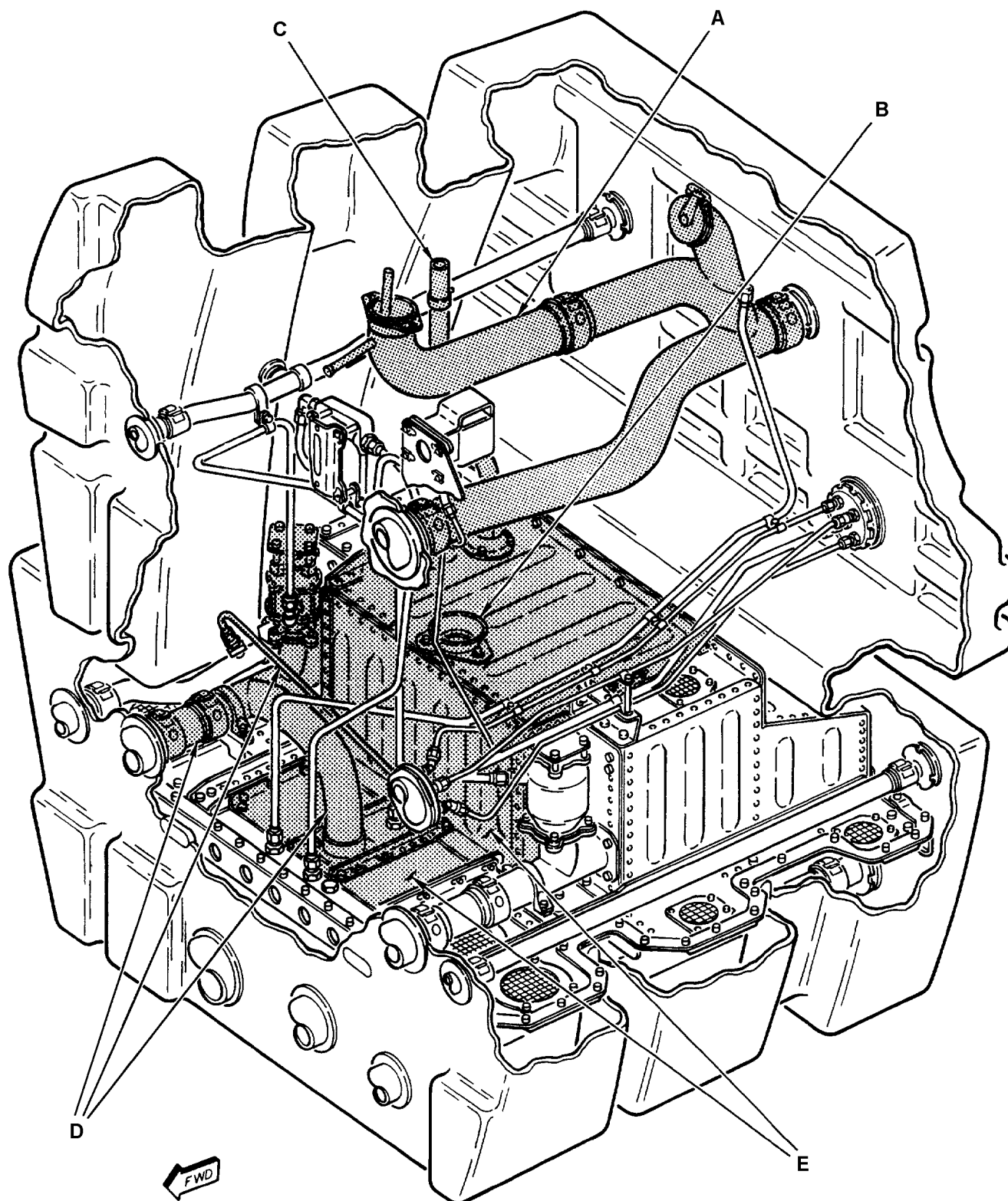


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 1)

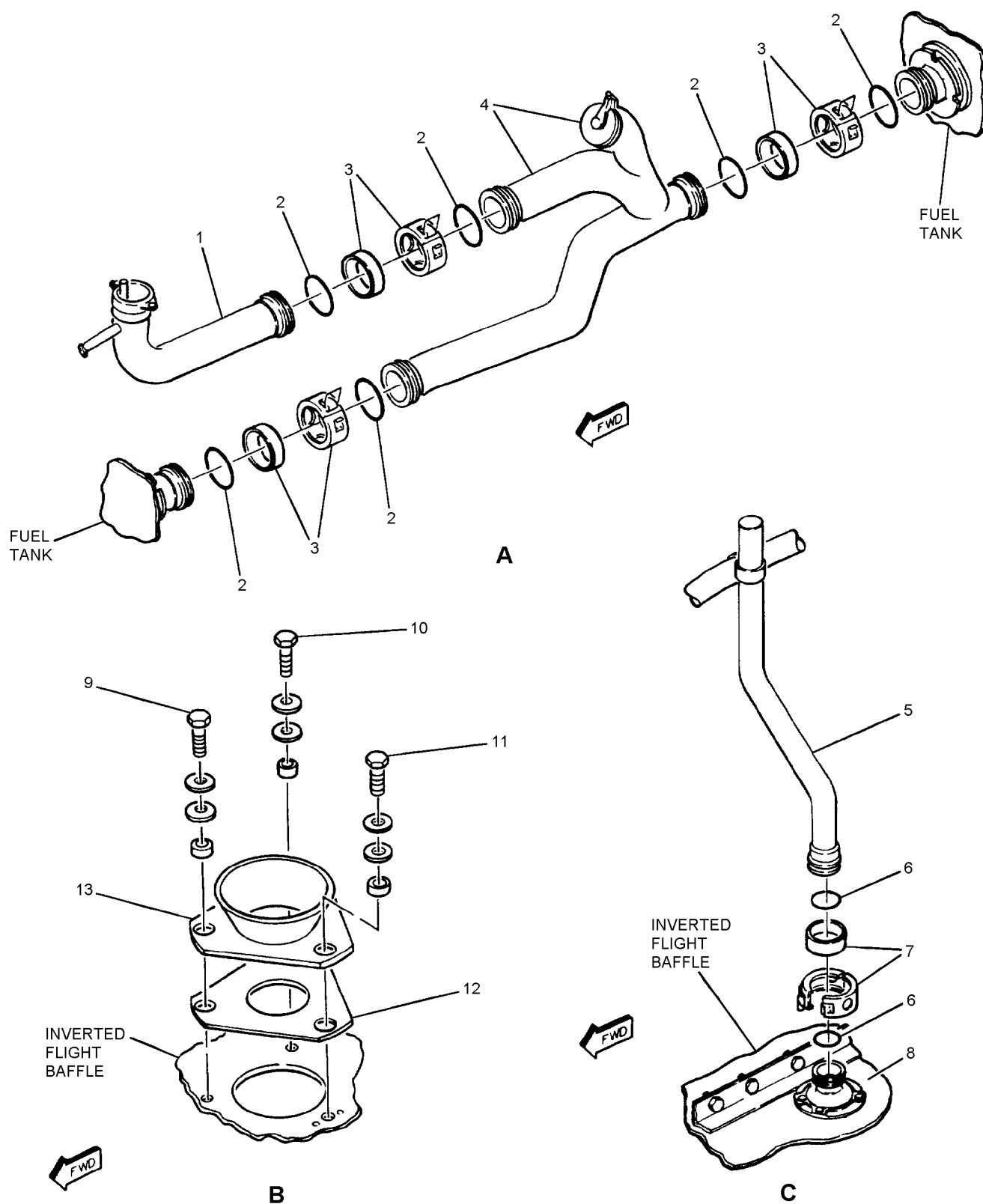


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 2)

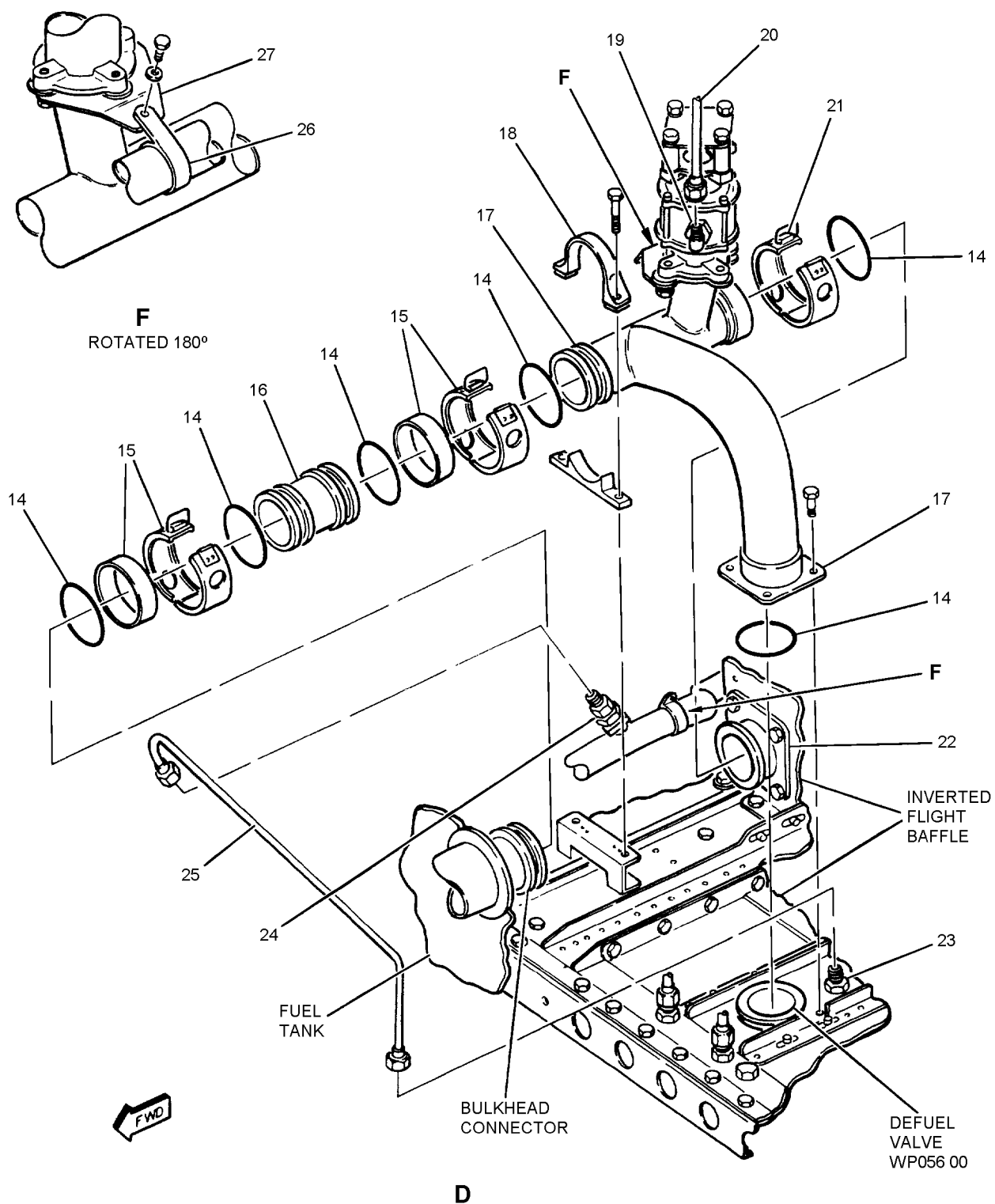


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 3)

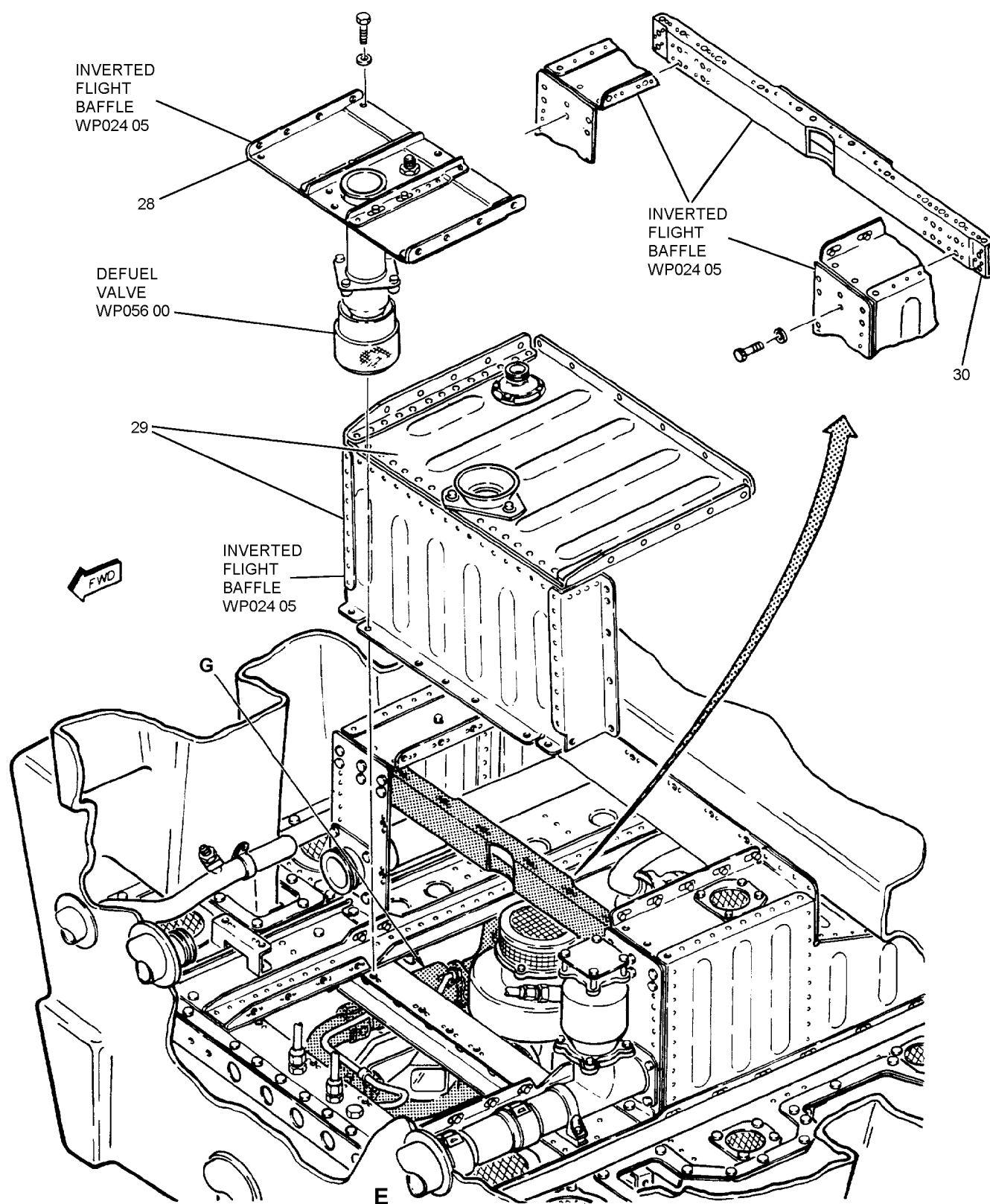


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 4)

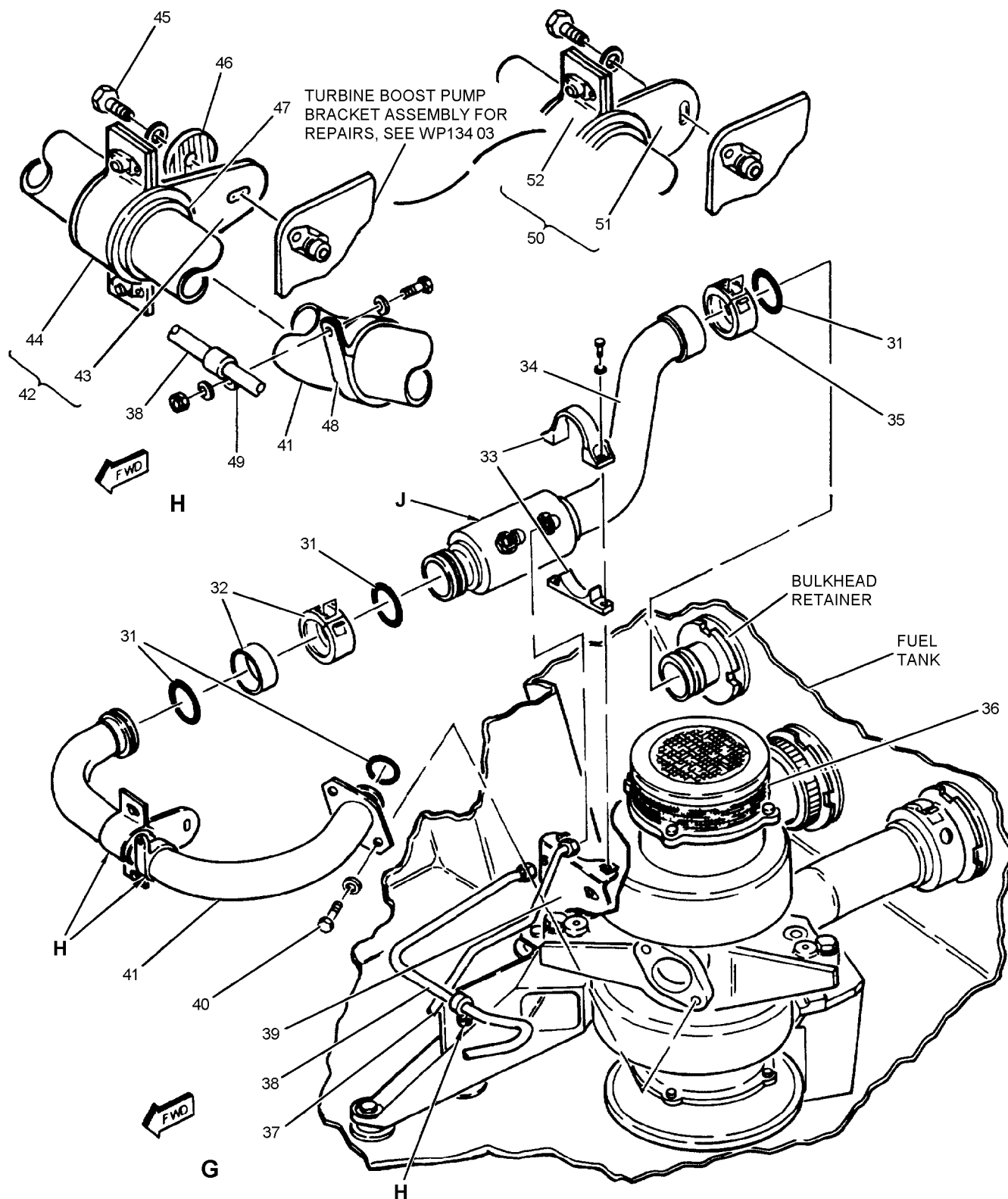


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 5)

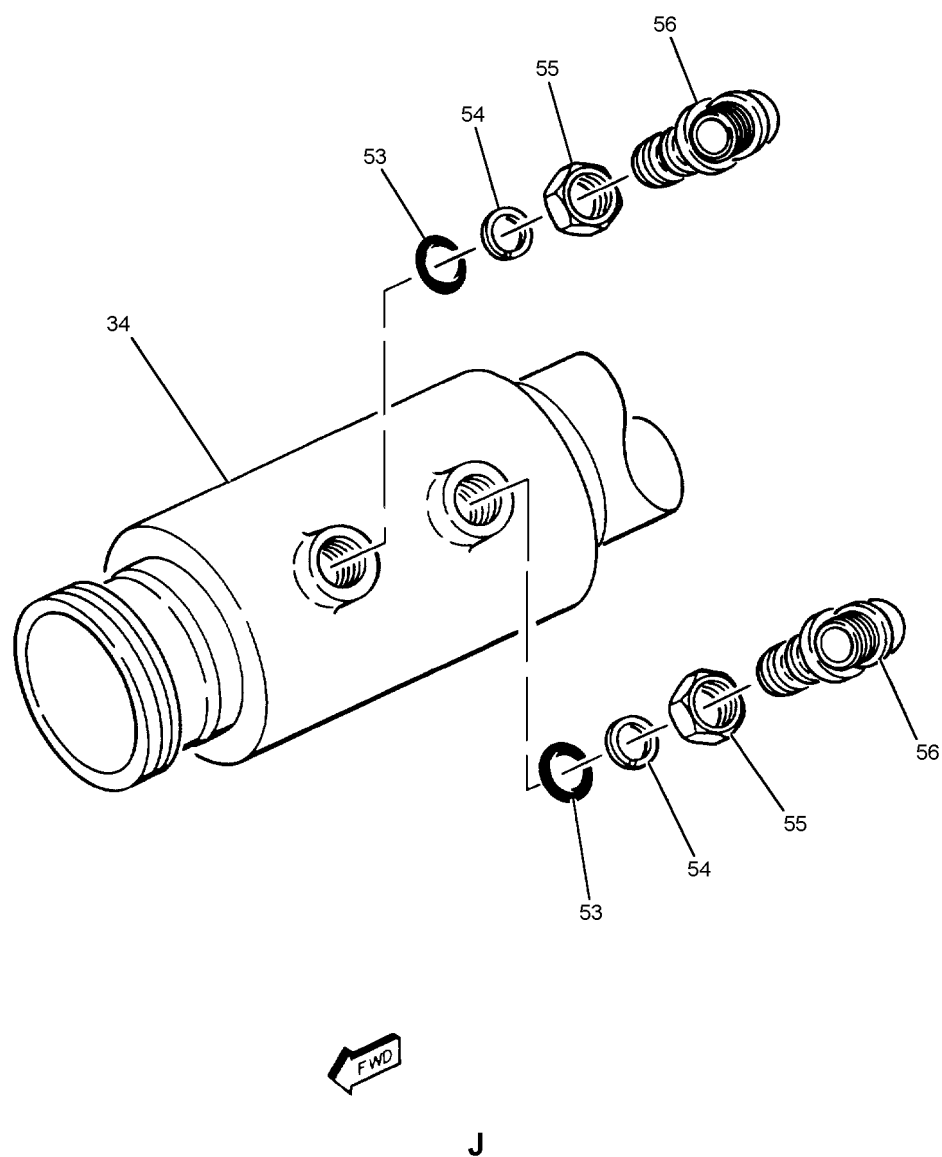


Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 6)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 3 FUEL TANK WASH FILTER (5FAP633)			
1	74A586381-1001	. TUBE ASSY - CLIMB VENT, FUEL TANK	1		XBOOO
		NO. 3 (76301)			
	NS103597-02	. NUT, SELF-LOCKING PLATE (80539)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	F10965-1-3	. SEE ABOVE (72962)	2	*	PAOZZ
	F29339-01-3	. SEE ABOVE (15653)	2	*	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
2	MS29513-230	. PACKING	6		PAOZZ
3	W901K40DE	. COUPLING, CLAMP, GROOVED (79326)	3		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	14J12-40A	. SEE ABOVE (24984)	3		PAOZZ
	W901F40DE	. SEE ABOVE (79326) (MCDONNELL SPEC	3	*	PAOZZ
		7M550-40D)			
4	74A585003-2001	. MAIN VENT ASSEMBLY (NO. 3 FUEL TANK	1		PAOZZ
		DIVE VENT CHECK VALVE) (76301)			
		(5VAP582)			
5	74A586314-1005	. TUBE ASSEMBLY METAL - VENT, AFT,	1		XBOZZ
		INVERTED FLT COMPT, TK 3 (76301)			
6	MS29513-214	. PACKING	2		PAOZZ
7	W901K16DE	. COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE)			
	14J12-16A	. SEE ABOVE (24984)	1		PAOZZ
	W901F16DE	. SEE ABOVE (79326) (MCDONNELL SPEC	1	*	PAOZZ
		7M550-16D)			
8	74A586248-2007	. CONNECTOR, FLANGE (FITTING)	1		XBOZZ
		(76301)			
9	NAS673V6	. BOLT	1		PAOZZ
	4M36-01016	. WASHER, FLAT (76301) (USE WITH INDEX 9)	2		PAOZZ
	NAS43DD3-11	. SPACER (USE WITH INDEX 9)	1		PAOZZ
10	NAS673V7	. BOLT	1		PAOZZ
	4M36-01016	. WASHER, FLAT (76301) (USE WITH INDEX 10)	2		PAOZZ
	NAS43DD3-11	. SPACER (USE WITH INDEX 10)	1		PAOZZ
11	NAS673V5	. BOLT	1		PAOZZ
	4M36-01016	. WASHER, FLAT (76301) (USE WITH INDEX 11)	2		PAOZZ
	NAS43DD3-11	. SPACER (USE WITH INDEX 11)	1		PAOZZ
12	74A586556-2001	. GASKET, PROBE GUIDE - RAISED	1		MDOZZ
		INVERTED BAFFLE TK 2 & TK 3 (76301)			
13	74A586297-2001	. GUIDE PROBE - FUEL QTY, TANK 2 & 3	1		XBOZZ
		(76301)			
14	MS29513-226	. PACKING	6		PAOZZ
15	W901K32DE	. COUPLING, CLAMP, GROOVED (79326)	2		PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE)			
	14J12-32A	. SEE ABOVE (24984)	2		PAOZZ
	W901F32DE	. SEE ABOVE (79326) (MCDONNELL SPEC	2	*	PAOZZ
		7M550-32D)			
16	74A586216-1005	. TUBE ASSEMBLY, METAL - REFUEL TANK	1		XBOZZ
		NO. 2 (76301)			

Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 7)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
17	74A586317-1005	.	MANIFOLD, FUEL, AIRCRAFT - FUEL TANK						1		XBOZZ
			NO. 3 (76301) (SUPERSEDES 74A586317-1001)								
	NAS673V2	.	BOLT (AP)						4		PAOZZ
	AN960JD10L	.	WASHER (AP)						4		PAOZZ
18	NAS1787A32G	.	CLAMP						1		PAOZZ
	NAS673V9	.	BOLT (AP)						2		PAOZZ
	AN960JD10L	.	WASHER (AP)						2		PAOZZ
19	7M148V6	.	ELBOW (76301)						1		XBOZZ
20	74A586341-1015	.	TUBE ASSEMBLY, METAL - PILOT VALVE						1		MGOZZ
			RH PORT TO REFUEL V (76301)								
			(SUPERSEDES 74A586341-1007 AND								
			74A586341-1011)								
21	W904K32DE	.	COUPLING, CLAMP, GROOVED (HALF)						1		PAOZZ
			(79326) (MCDONNELL SPEC 7M765-32D-1)								
	14C12-32A	.	SEE ABOVE (24984)						1		PAOZZ
	W904F32DE	.	SEE ABOVE (79326) (MCDONNELL SPEC						1	*	PAOZZ
			7M550-32D-1)								
22	74A586248-2001	.	CONNECTOR, FLANGE (FITTING) (76301)						1		XBOZZ
	NAS674V3	.	BOLT (AP)						4		PAOZZ
	AN960JD416L	.	WASHER (AP)						4		PAOZZ
23	7M637BT-6D	.	NIPPLE (76301)						1	A	PAOZZ
	7M637BY-6D	.	ELBOW (76301)						1	B	PAOZZ
24	7M637BD-6D	.	NIPPLE (76301)						2		PAOZZ
	MS29512-06	.	PACKING (USE WITH INDEX 24)						1		PAOZZ
25	74A586669-1017	.	TUBE ASSEMBLY, METAL - PRESS SENSOR						1		MGOZZ
			TO DEFUEL LINE, TK 3 (76301)								
			(SUPERSEDES 74A586669-1013)								
26	MS25281-R20	.	CLAMP (SUPERSEDES MS25281-20)						1		PAOZZ
	NAS673V3	.	BOLT (AP)						1		PAOZZ
	AN960JD10L	.	WASHER (AP)						1		PAOZZ
27	74A586323-1035	.	BRACKET ASSY (76301)						1		XBOZZ
	MS21060L3	.	NUT, PLATE (USE WITH INDEX 27)						1		PAOZZ
	NAS1079AD3 #	.	RIVET (AP)						2		-
28	74A586315-2013	.	PANEL, ASSY FRONT (76301) (FOR REPAIR						1		XBOOO
			SEE WP024 05)								
	NAS673V4	.	BOLT (AP)						AR		PAOZZ
	AN960JD10L	.	WASHER (AP)						AR		PAOZZ
29	74A586315-2015	.	PANEL ASSY, CENTER (76301) (FOR REPAIR						1		XBOOO
			SEE WP024 05)								
	NAS673V4	.	BOLT (AP)						AR		PAOZZ
	AN960JD10L	.	WASHER (AP)						AR		PAOZZ
30	74A586323-1029	.	STIFFENER (76301) (FOR REPAIR SEE						1	C	XBOOO
			WP024 05)								
	74A586323-2071	.	SEE ABOVE						1	D	XBOOO
	NAS673V4	.	BOLT (AP)						AR		PAOZZ
	AN960JD10L	.	WASHER (AP)						AR		PAOZZ
31	MS29513-222	.	PACKING						4		PAOZZ
32	W9K24DE	.	COUPLING, CLAMP, GROOVED (79326)						1		PAOZZ
			(MCDONNELL SPEC 7M765-24D)								
			(INCLUDES SLEEVE)								
	14J12-24A	.	SEE ABOVE (24984)						1		PAOZZ
	W901F24DE	.	SEE ABOVE (79326) (MCDONNELL SPEC						1	*	PAOZZ
			7M550-24D)								

Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 8)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
33	NAS1787A24G	.	CLAMP	.....					2		PAOZZ
	NAS673V9	.	BOLT (AP)	.....					2		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					2		PAOZZ
34	74A586331-1003	.	TUBE ASSEMBLY - ENGINE BOOST PMP,						1		PAOZZ
			RH, MOTIVE FLOW (NO. 3 FUEL TANK								
			WASH FILTER) (76301) (5FAP633)								
35	W904K24DE	.	COUPLING, CLAMP, GROOVED (HALF)						1		PAOZZ
			(79326) (MCDONNELL SPEC 7M765-24D-1)								
	14C12-24A	.	SEE ABOVE (24984)						1		PAOZZ
	W904F24DE	.	SEE ABOVE (79326) (MCDONNELL SPEC						1	*	PAOZZ
			7M550-24D-1)								
36	5007006C	.	PUMP, TURBINE DRIVEN (NO. 3 FUEL TANK						1		PAODD
			ENGINE FUEL TURBINE BOOST PUMP)								
			(99167) (MCDONNELL SPEC 74-580168-101)								
			(5BAP599) (REPLACES 5007006B)								
	5007006B	.	SEE ABOVE (REPLACED BY 5007006C)						1	*	PAODD
			(USE UNTIL EXHAUSTED)								
37	74A587109-1009	.	TUBE ASSEMBLY, METAL - MOTIVE FLOW						1		MGOZZ
			TO INTERCONNECT VALVE (76301)								
			(SUPERSEDES 74A587109-1003,								
			74A587109-1005 AND 74A587109-1007)								
38	74A587110-1003	.	TUBE ASSEMBLY, METAL - MOTIVE FLOW						1		MGOZZ
			TO JET SENSOR, TK 3 (76301)								
39	74A586309-2029	.	ANGLE (76301)						1		MGOZZ
	NAS673V2	.	BOLT (AP)						2		PAOZZ
	AN960JD10L	.	WASHER (AP)						2		PAOZZ
	A11144-7-3	.	NUT, CLIP (72962) (MCDONNELL SPEC						2	*	PAOZZ
			ST3M523C3M) (USE WITH INDEX 39)								
	130091	.	SEE ABOVE (76530)						2	*	PAOZZ
40	NAS674V4	.	BOLT						2		PAOZZ
	4M36-02069	.	WASHER, FLAT (AP) (76301)						2		PAOZZ
41	74A587108-1005	.	TUBE ASSEMBLY, METAL - TURBO BOOST						1		XBOZZ
			PUMP, TK 3 (76301) (SUPERSEDES								
			74A587108-1003)								
42	74A586750-1003	.	CLAMP - FUEL LINE, MOTIVE FLOW TO						1	B	XBOOO
			TURBO PUMP (76301)								
43	74A586750-2007	.	STRAP, RETAINING (76301)						1	B	PAOZZ
44	74A586750-2005	.	STRAP, RETAINING (76301)						1		PAOZZ
	NAS673V4	.	BOLT (AP)						2		PAOZZ
	AN960JD10L	.	WASHER (AP)						2		PAOZZ
45	NAS674V5	.	BOLT						1		PAOZZ
	AN960JD416L	.	WASHER (USE WITH INDEX 45)						1		PAOZZ
46	74A586750-2009	.	WASHER (76301)						1	B	PAOZZ
47	74A586750-2011	.	CUSHION (76301)						2	B	PAOZZ
48	MS25281-R24	.	CLAMP (SUPERSEDES MS25281-24)						1		PAOZZ
49	MS25281-R6	.	CLAMP (SUPERSEDES MS25281-6)						1		PAOZZ
	NAS673V3	.	BOLT (AP)						1		PAOZZ
	AN960JD10L	.	WASHER (AP)						2		PAOZZ
	NAS1291C3M	.	NUT (AP)						1		PAOZZ
50	74A586750-1001	.	CLAMP - FUEL LINE, MOTIVE FLOW TO						1	A	XBOOO
			TURBO PUMP (76301)								
51	74A586750-2003	.	STRAP, RETAINING (76301)						1	A	PAOZZ

Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 9)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
52	74A586750-2005	.							1		PAOZZ
	NAS673V4	.							2		PAOZZ
	AN960JD10L	.							2		PAOZZ
53	MS29512-06	.							2		PAOZZ
54	M528773-06	.							2		PAOZZ
55	AN924-6D	.							2		PAOZZ
56	7M637BY-6D	.							2		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

CODE	USABLE ON	MODEL
A	161924 THRU 162421	F/A-18A/B
B	162422 AND UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 18	F/A-18A/B
C	161924 & UP	F/A-18A/B
D	161353 THRU 161761 AFTER F/A-18AFC 18	F/A-18A/B

Figure 1. No. 3 Fuel Tank Wash Filter (5FAP633) (Sheet 10)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 2 FUEL TANK ENGINE FUEL BOOST JET EJECTOR (5BAP599)

ENGINE FUEL SUPPLY SYSTEM

Title	WP Number
No. 2 Fuel Tank Engine Fuel Boost Jet Ejector - 161353 THRU 161715 BEFORE	
F/A-18 AFC 18 AND F/A-18 AFC 53	133 01
No. 2 Fuel Tank Engine Fuel Boost Jet Ejector - 161716 THRU 161761 BEFORE	
F/A-18 AFC 18 AND F/A-18 AFC 53	133 02

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****NO. 2 FUEL TANK ENGINE FUEL BOOST JET EJECTOR (5BAP599)****ENGINE FUEL SUPPLY SYSTEM****EFFECTIVITY: 161353 THRU 161715 BEFORE F/A-18 AFC 18
AND F/A-18 AFC 53**

Reference Material

Fuel System	A1-F18AC-460-300
No. 2 Fuel Tank Access Cover	WP005 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer, and Engine Fuel Supply System Test	WP012 00
Line Maintenance Procedures	A1-F18AC-LMM-000

Alphabetical Index

Subject	Page No.
Illustrated Parts Breakdown	3
Installation	2
Removal	2

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 83	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (7)	MS29513-222
Packing (6)	MS29513-226
Packing (2)	MS29513-230
Packing	MS29513-330
Packing (3)	M25988/1-312
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove bolts (1, figure 1), guide (2), and attaching parts.
- c. Remove couplings (6, detail A), packings (5), and tube (4).
- d. Remove clamp (7, detail B) and attaching parts.
- e. Disconnect tube (20).
- f. Remove couplings (10 and 17) and packings (5 and 16).
- g. Remove clamp (18) and attaching parts.
- h. Remove manifold (9), packing (12), and attaching parts.
- i. Disconnect tube (29, detail C).
- j. Disconnect tube (25) and remove nut (26) and washer.
- k. Remove retainers (27 and 28), bolts (22), and washers.
- l. Remove or loosen bolts (22) and washers, as required, to allow removal of webs (23, 24, and 31).

- m. Remove coupling (32), packings (12), and tube (13).
- n. Remove bolts (36, detail D), attaching parts, and support (34).
- o. Remove bolt and washer from tube (37).
- p. Remove couplings (32), packings (12), and tube (37).
- q. Remove bolt (39) and washer on left side of ejector (41).
- r. Remove bolts (40) and washers from bracket on right side of ejector (41).
- s. Disconnect nut assembly (42) and remove packing (43) and ejector (41).
- t. Separate support (38) from ejector (41) by removing bolt (39) and washer.

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



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- b. Lubricate new packings with petrolatum before installation.

WARNING

To prevent fuel system malfunction during inverted flight, shuttle inside ejector must move freely from top to bottom.

- c. Turn ejector (41, detail E) upside down, then right side up and make sure shuttle inside ejector moves freely from top to bottom. (QA)
- d. Prepare mating surfaces of ejector (41), bolt (39), and attaching parts of support (38) for electrical bond (A1-F18AC-LMM-000).
- e. Install support (38) on ejector (41) with bolt (39).

- f. Install packings (12, 43, and 46).
- g. Position nut assembly (42) on ejector (41).
- h. Connect nut assembly (42). Handtighten nut.
- i. Install bolts (40) and attaching parts to support (38). Seal bolt (40) threads per WP013 00.
- j. Install couplings (32), tube (37), and attaching parts.
- k. Inspect ejector (41) and make sure top and bottom screens do not have damage which could restrict movement of shuttle inside ejector. (QA)
- l. Inspect for and remove any foreign objects from below baffle area. (QA)
- m. Install support (34, detail D), bolts (36), and attaching parts.
- n. Install packings (12, detail C), tube (13), and coupling (32).
- o. Position webs (23 and 24) over web (31). Make sure webs are between beam and fuel tank.
- p. Install retainer (27) over retainer (28).
- q. Install or tighten bolts (22) and washers, as required.
- r. Install nut (26) and washer and connect tube (25).
- s. Connect tube (29).
- t. Prepare mating surfaces of manifold (9, detail B) and baffle for electrical bond (A1-F18AC-LMM-000).
- u. Install packing (12), manifold (9), and attaching parts.
- v. Install clamp (18) and attaching parts.
- w. Install packings (5 and 16) and couplings (10 and 17).
- x. Connect tube (20).
- y. Install clamp (7) and attaching parts.
- z. Install packings (5, detail A), tube (4), and couplings (6).
- aa. Install guide (2), bolts (1), and attaching parts.
- ab. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)
- ac. Install no. 2 fuel tank access cover (WP005 00).
- ad. Connect utility and emergency battery connectors (WP013 00).
- ae. Do an internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

3. ILLUSTRATED PARTS BREAKDOWN.

- 4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

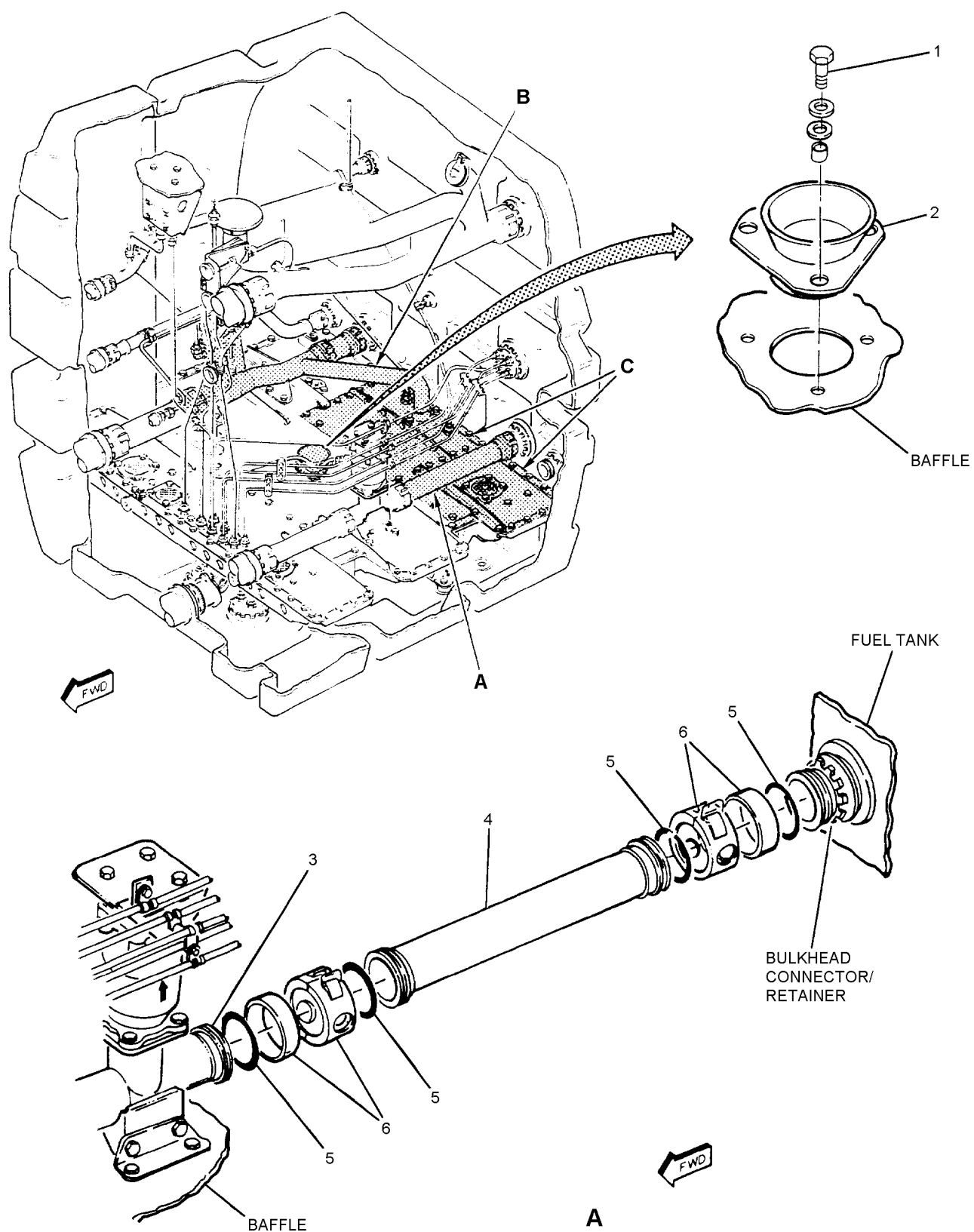


Figure 1. No. 2 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP599) (Sheet 1)

1330101A

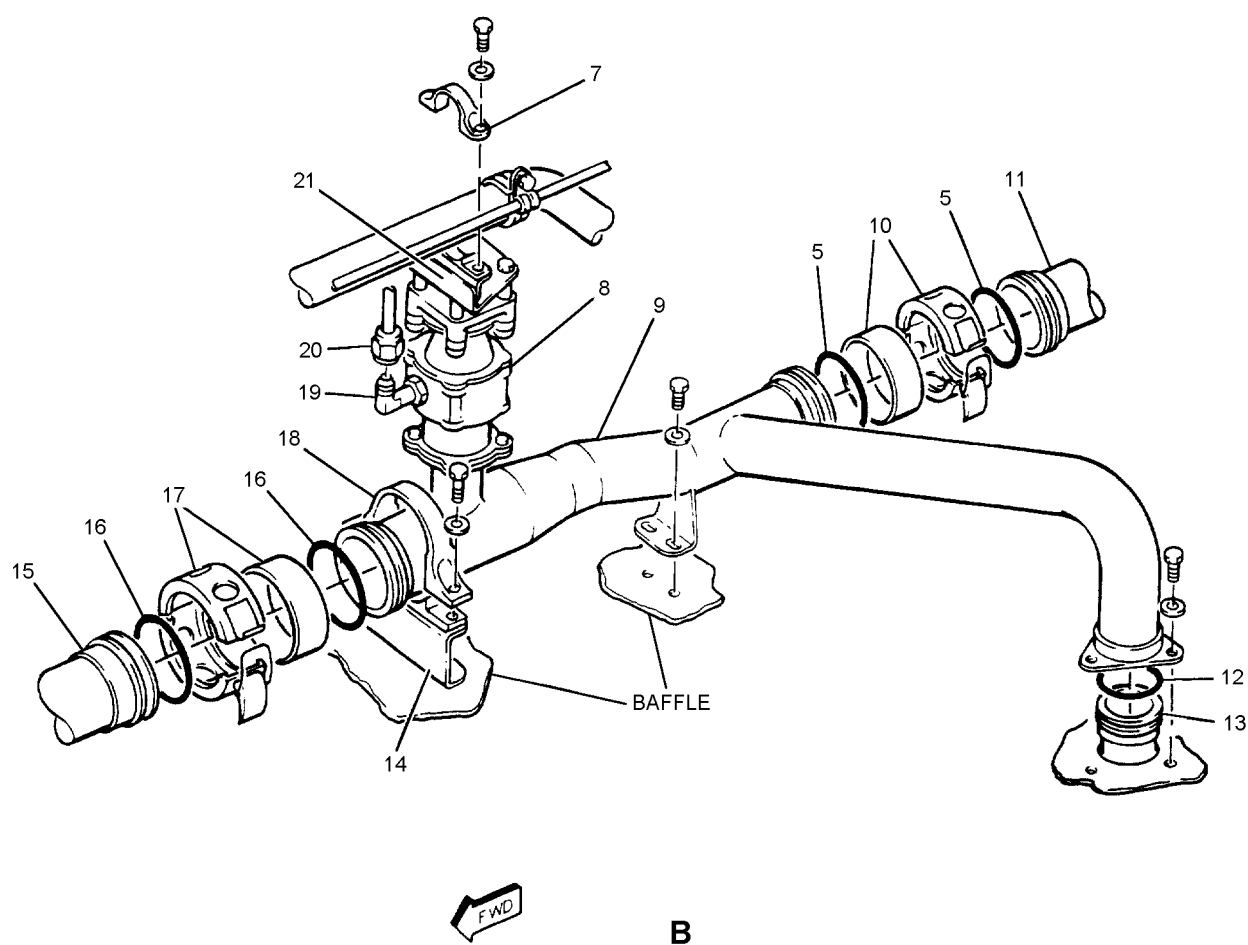


Figure 1. No. 2 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP599) (Sheet 2)

1330101B

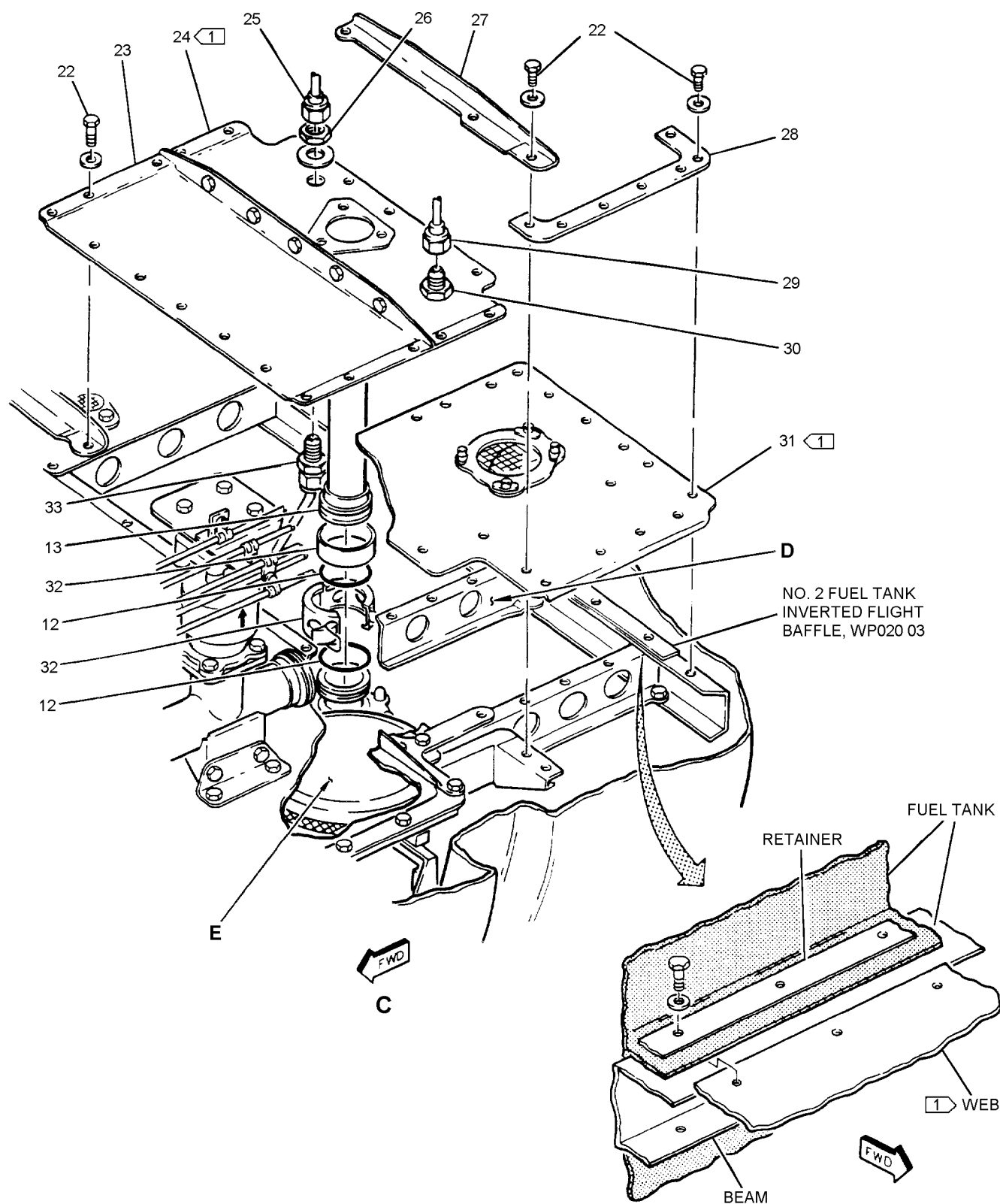


Figure 1. No. 2 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP599) (Sheet 3)

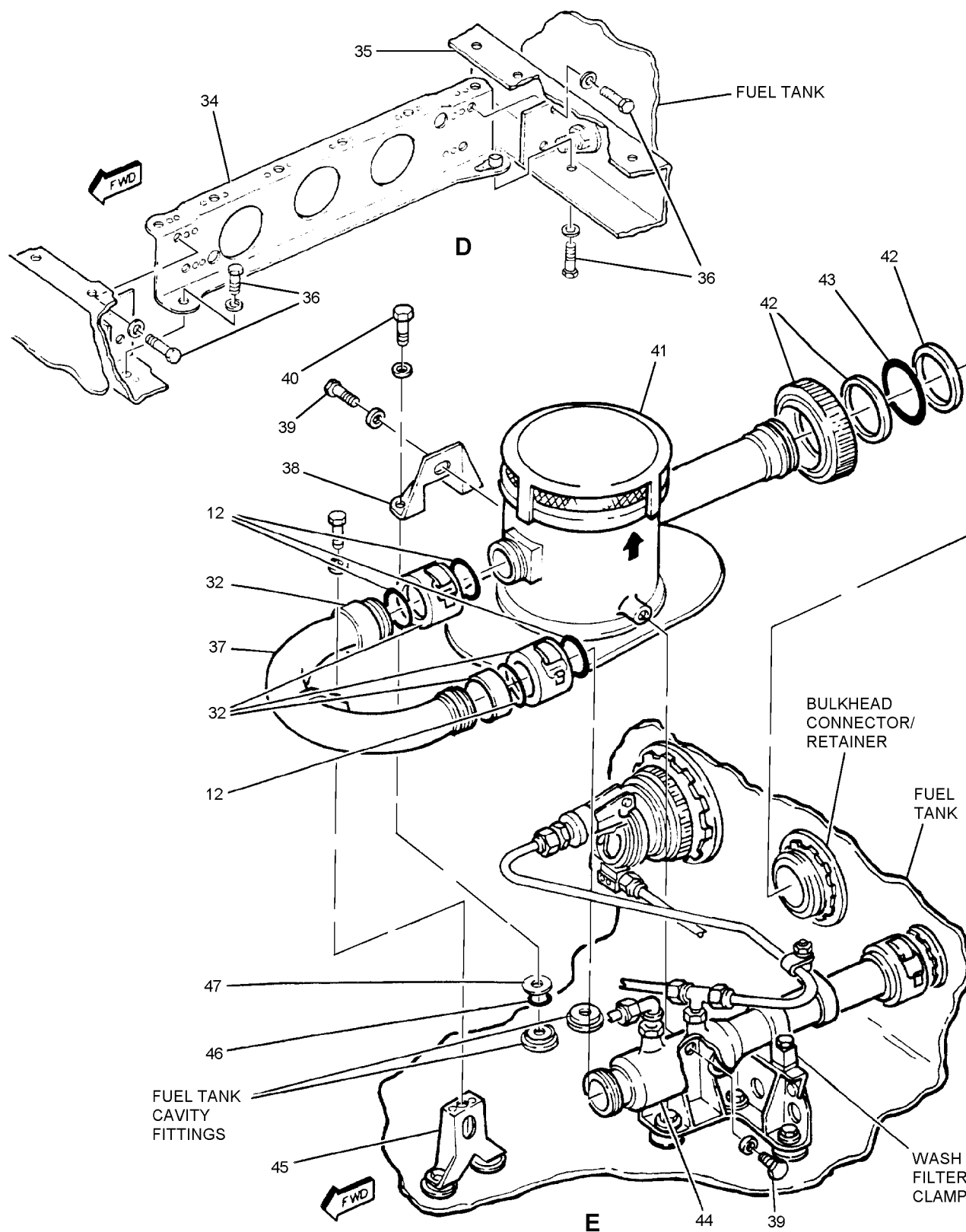


Figure 1. No. 2 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP599) (Sheet 4)

1330101D

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 2 FUEL TANK ENGINE FUEL BOOST			
		JET EJECTOR (5BAP599)			
1	NAS673V4	. BOLT	3		PAOZZ
	4M36-01016	. WASHER (76301) (USE WITH INDEX 1)	6		PAOZZ
	NAS43DD3-8	. SPACER (USE WITH INDEX 1)	3		PAOZZ
2	74A586297-2001	. GUIDE, PROBE - FUEL QTY, TANK 2 & 3	1		XBOZZ
		(76301)			
3	74A586266-1001	. TEE ASSEMBLY, TRANSFER PUMP - TANK	1		XBOOO
		NO. 2 (76301)			
	NS103597-02	. NUT, SELF-LOCKING, PLATE (MCDONNELL	4	*	PAOZZ
		SPEC ST3M470C3M) (USE WITH INDEX 3)			
	F10965-1-3	. NUT, SELF-LOCKING, PLATE (MCDONNELL	4	*	PAOZZ
		SPEC ST3M470C3M) (USE WITH INDEX 3)			
	F29339-01-3	. NUT, SELF-LOCKING, PLATE (MCDONNELL	4	*	PAOZZ
		SPEC ST3M470C3M) (USE WITH INDEX 3)			
	MS20426AD3 #	. RIVET (AP)	2		-
4	74A586265-1003	. TUBE ASSEMBLY, METAL - FUEL	1		XBOZZ
		TRANSFER SYSTEM, TANK NO. 2 (76301)			
		(SUPERSEDES 74A586265-1001)			
5	M529513-226	. PACKING	6		PAOZZ
6	W901K32DE	. COUPLING, CLAMP, GROOVED (79326)	2	*	PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE)			
	14J12-32A	. COUPLING, CLAMP, GROOVED (24984)	2	*	PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE)			
7	NA51787A20G	. CLAMP	1		PAOZZ
	NA5673V3	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
8	2760113-113	. VALVE, CHECK - REFUEL LEVEL (NO. 2	1		PAOZZ
		FUEL TANK LEVEL CONTROL SHUTOFF			
		VALVE) (92003) (MCDONNELL SPEC			
		74-580108-223) (5VAP597)			
	2760113.111	. VALVE, CHECK - REFUEL LEVEL (NO. 2	1	*	PAOZZ
		FUEL TANK LEVEL CONTROL SHUTOFF			
		VALVE) (92003) (MCDONNELL SPEC			
		74-580108-217) (5VAP597)			
	2760113-109	. VALVE, CHECK - REFUEL LEVEL (NO. 2	1	*	PAOZZ
		FUEL TANK FUEL LEVEL CONTROL			
		SHUTOFF VALVE) (92003) (MCDONNELL			
		SPEC 74-580108-215) (5VAP597)			
	2760113-107	. VALVE, CHECK - REFUEL LEVEL (NO. 2	1	*	PAOZZ
		FUEL TANK FUEL LEVEL CONTROL			
		SHUTOFF VALVE) (92003) (MCDONNELL			
		SPEC 74-580108-201) (5VAP597)			
9	74A586203-1001	. MANIFOLD AIRCRAFT - TANK NO. 2	1		XBOZZ
		REFUEL SYS (76301)			
	NAS673V3	. BOLT (AP)	5		PAOZZ
	AN960JD10L	. WASHER (AP)	5		PAOZZ
10	W901K32DE	. COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE)			

Figure 1. No. 2 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP599) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USE ON CODE	SM&R CODE
		1 2 3 4 5 6 7			
	14J12-32A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-32D) (INCLUDES SLEEVE)	1		PAOZZ
	W901F32DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-32D) (INCLUDES SLEEVE)	1	*	PAOZZ
11	74A586216-1001	. TUBE ASSEMBLY, METAL - REFUEL TANK NO. 2 (76301)	1		XBOZZ
12	MS29513-222	. PACKING	7		PAOZZ
13	74A586264-1005	. TUBE ASSEMBLY, METAL - PYLON SUCTION LINE, TANK NO. 2 (76301) (SUPERSEDES 74A586264-1003)	1		XBOZZ
14	74A586204-2403	. SUPPORT ASSY (76301) (FOR REPAIR SEE WP020 04)	1		XBOOO
15	74A586261-1005	. TUBE ASSEMBLY, METAL - TANK 2 REFUEL, Y386.8 TO Y396.2 (76301) (SUPERSEDES 74A586261-1003)	1		XBOZZ
16	MS29513-230	. PACKING	2		PAOZZ
17	W901K40DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-40D) (INCLUDES SLEEVE)	1		PAOZZ
	14J12-40A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-40D) (INCLUDES SLEEVE)	1		PAOZZ
	W901F40DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-40D) (INCLUDES SLEEVE)	1	*	PAOZZ
18	NAS1787A40G	. CLAMP	1		PAOZZ
	NAS673V9	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
19	7M148V6	. ELBOW (76301)	1		PAOZZ
	7M148DA6	. ELBOW (76301)	1	*	PAOZZ
20	74A586283-1003	. TUBE ASSEMBLY, METAL - FLOAT VALVE TO RH PORT TO REFUEL V (76301)	1		MGOZZ
21	74A586244-1013	. SUPPORT (76301)	1		XBOGG
	A11144-7-3	. NUT, CLIP (72962) (MCDONNELL SPEC ST3M523C3M) (USE WITH INDEX 21)	1	*	PAOZZ
	130091	. NUT, CLIP (76530) (MCDONNELL SPEC ST3M523C3M) (USE WITH INDEX 21)	1	*	PAOZZ
22	NAS673V5	. BOLT	AR		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 22)	AR		PAOZZ
23	74A586204-2377	. WEB (76301)	1		MGOZZ
24	74A586204-2411	. WEB ASSY (76301) (FOR REPAIR SEE WP020 04)	1		XBOOO
25	74A586682-1001	. TUBE ASSEMBLY, METAL - GRAVITY FEED INTERCONNECT TO TNK (76301)	1		MGOZZ
26	AN924-6D	. NUT	1		PAOZZ
	AN960JD916L	. WASHER (USE WITH INDEX 26)	1		PAOZZ
27	74A586204-2235	. RETAINER (76301)	1		MGOZZ
28	74A586204-2251	. RETAINER (76301)	1		MGOZZ
29	74A586242-1001	. TUBE ASSEMBLY, METAL - VENT AFT, INVERTED FLT COMPT (76301)	1		MGOZZ
30	7M637BT-6D	. NIPPLE (76301)	1		PAOZZ

Figure 1. No. 2 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP599) (Sheet 6)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
31	74A586204-2431	. WEB ASSY, AFT, LH (76301) (FOR REPAIR SEE WP020 04)	1		XBOOO
32	W901K24DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-24D) (INCLUDES SLEEVE)	3		PAOZZ
	14J12-24A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-24D) (INCLUDES SLEEVE)	3		PAOZZ
	W901F24DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-24D) (INCLUDES SLEEVE)	3	*	PAOZZ
33	7M637BT-6D	. NIPPLE (76301)	1		PAOZZ
34	74A586204-2337	. SUPPORT ASSY (76301) (FOR REPAIR SEE WP020 04)	1		XBOOO
35	74A586204-2391	. BEAM ASSY (AFT) (76301) (FOR REPAIR SEE WP020 04)	1		XBOOO
36	NAS673V5	. BOLT	AR		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 36)	AR		PAOZZ
37	74A586269-1003	. TUBE ASSEMBLY, METAL FUEL BOOST PMP MOTIVE FL, TK NO. 2 (76301)	1		XBOZZ
	NAS673V3	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
38	74A586662-2003	. SUPPORT, FUEL PUMP - MAIN EJECTOR, TANK NO. 3, LH (76301)	1		XBOZZ
39	NAS674V2	. BOLT (AP)	2		PAOZZ
	AN960JD416	. WASHER (USE WITH INDEX 39)	2		PAOZZ
40	NAS674V2	. BOLT	2		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 40)	2		PAOZZ
41	2800099-104	. EJECTOR, JET - ENGINE FUEL BOOST (NO. 2 FUEL TANK ENGINE FUEL BOOST JET EJECTOR) (92003) (MCDONNELL SPEC 74-580112-119) (5BAP599)	1		PAOZZ
42	W702-32D	. NUT ASSEMBLY, TUBE COUPLING (79326) (MCDONNELL SPEC ST7M191-32D) (INCLUDES NUT AND TWO WASHERS)	1	*	PAOZZ
	12H72-32D	. SEE ABOVE (24984)	1	*	PAOZZ
43	MS29513-330	. PACKING	1		PAOZZ
44	74A586268-1001	. TUBE ASSEMBLY, METAL - ENGINE FUEL SYS (NO. 2 FUEL TANK WASH FILTER) (76301) (5FAP632)	1		PAOZZ
45	74A586668-1001	. SUPPORT - MOTIVE FLOW LINE FUEL TANK NO. 2 (76301)	1		XBOOO
	MS21060L3	. NUT, PLATE (USE WITH INDEX 45)	1		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
46	M25988/1-312	. PACKING	3		PAOZZ
47	74A586244-2007	. WASHER (76301)	3		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

Figure 1. No. 2 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP599) (Sheet 7)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 2 FUEL TANK ENGINE FUEL BOOST JET EJECTOR (5BAP599)

ENGINE FUEL SUPPLY SYSTEM

EFFECTIVITY: 161716 THRU 161761 BEFORE F/A-18 AFC 18
AND F/A-18 AFC 53

Reference Material

Fuel System	A1-F18AC-460-300
No. 2 Fuel Tank Access Cover	WP005 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer, and Engine Fuel Supply System Test	WP012 00
Line Maintenance Procedures	A1-F18AC-LMM-000

Alphabetical Index

Subject	Page No.
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Removal	1

Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required (Cont)

Materials Required		Nomenclature	Specification or Part Number
Nomenclature	Specification or Part Number	Petrolatum, Technical	VV-P-236 (CAGE 81348)
Packing (4)	MS29513-222	1. REMOVAL.	
Packing	MS29513-334	a. Do general preparation for removal (WP013	
Packing (2)	M25988/1-312	00).	

- b. Remove tube (2, figure 1, detail B).
- c. Remove panel (1, detail A) and attaching parts.
- d. Remove couplings (11, detail C), tube (12), packing (10), and attaching parts.
- e. Remove nut assembly (4) and packing (5).
- f. Remove bolt (6) at support.
- g. Remove bolts (14), ejector (3), washers (9), attaching parts, and packings (8).
- h. Remove bolt (6), washer, and support (13) from ejector (3).

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings with petrolatum.

WARNING

To prevent fuel supply malfunction during inverted flight, shuttle inside ejector must move freely from top to bottom.

- c. Turn ejector (3, figure 1, detail C) upside down, then right side up and make sure shuttle inside ejector moves freely from top to bottom. (QA)

- d. Prepare mating surfaces of bolts (6 and 14), washers, ejector (3), and fuel tank fittings for electrical bond (A1-F18AC-LMM-000).

- e. Position support (13) on ejector (3) and install bolt (6) and washer.

- f. Install packings (10).

- g. Apply sealant to threads of bolts (14) per WP013 00.

- h. Position ejector (3) and install washers (9), packing (8), bolts (6 and 14), and attaching parts.

- i. Install packing (5) and nut assembly (4). Tighten nut assembly handtight.

- j. Install packings (10), tube (12), couplings (11), and attaching parts.

- k. Install panel (1, detail A) and attaching parts.

- l. Install tube (2, detail B).

- m. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)

- n. Install no. 2 fuel tank access cover (WP005 00).

- o. Connect utility and emergency battery connectors (WP013 00).

- p. Do internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200 WP012 00).

3. ILLUSTRATED PARTS BREAKDOWN.

- 4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

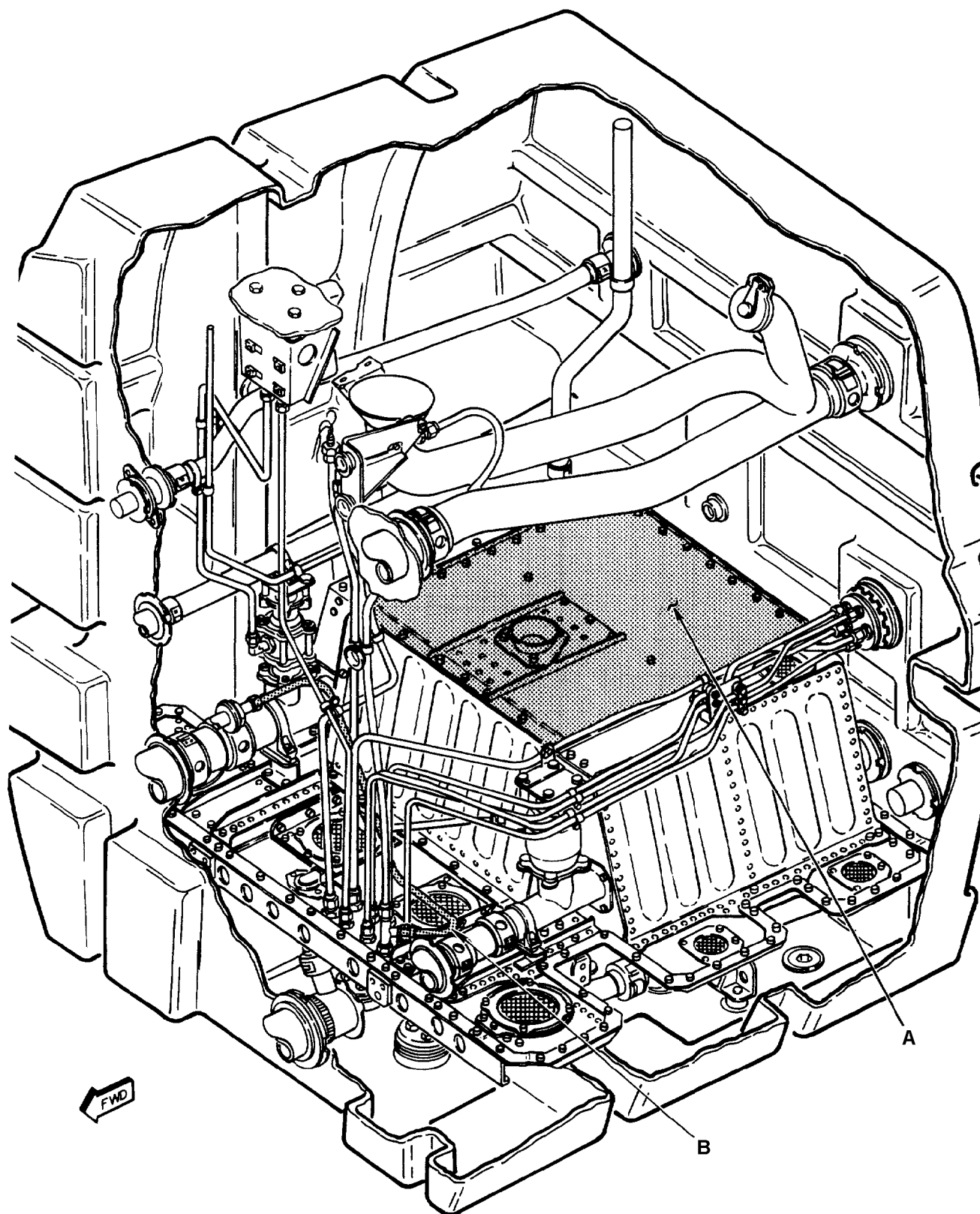
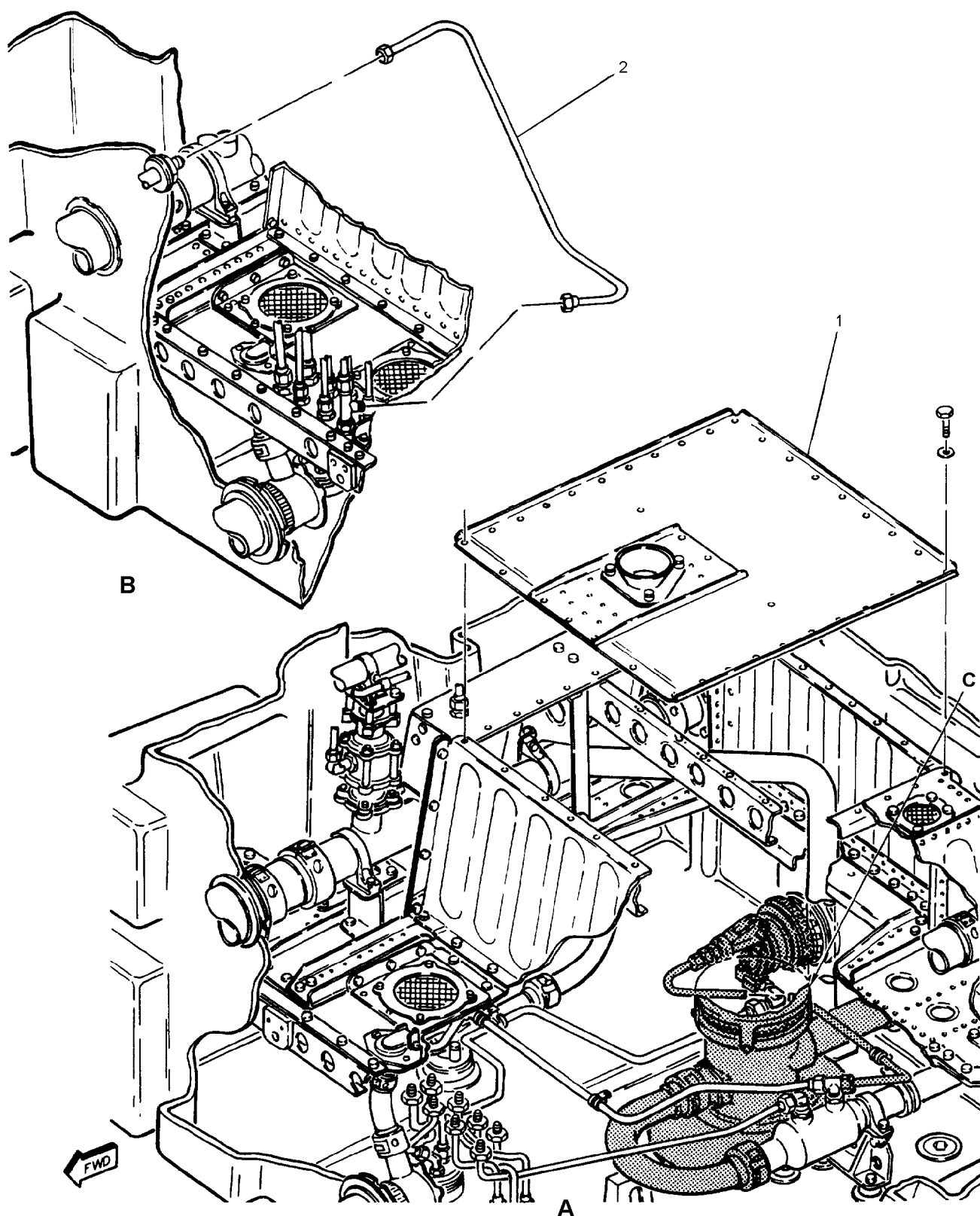


Figure 1. No. 2 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP599) (Sheet 1)



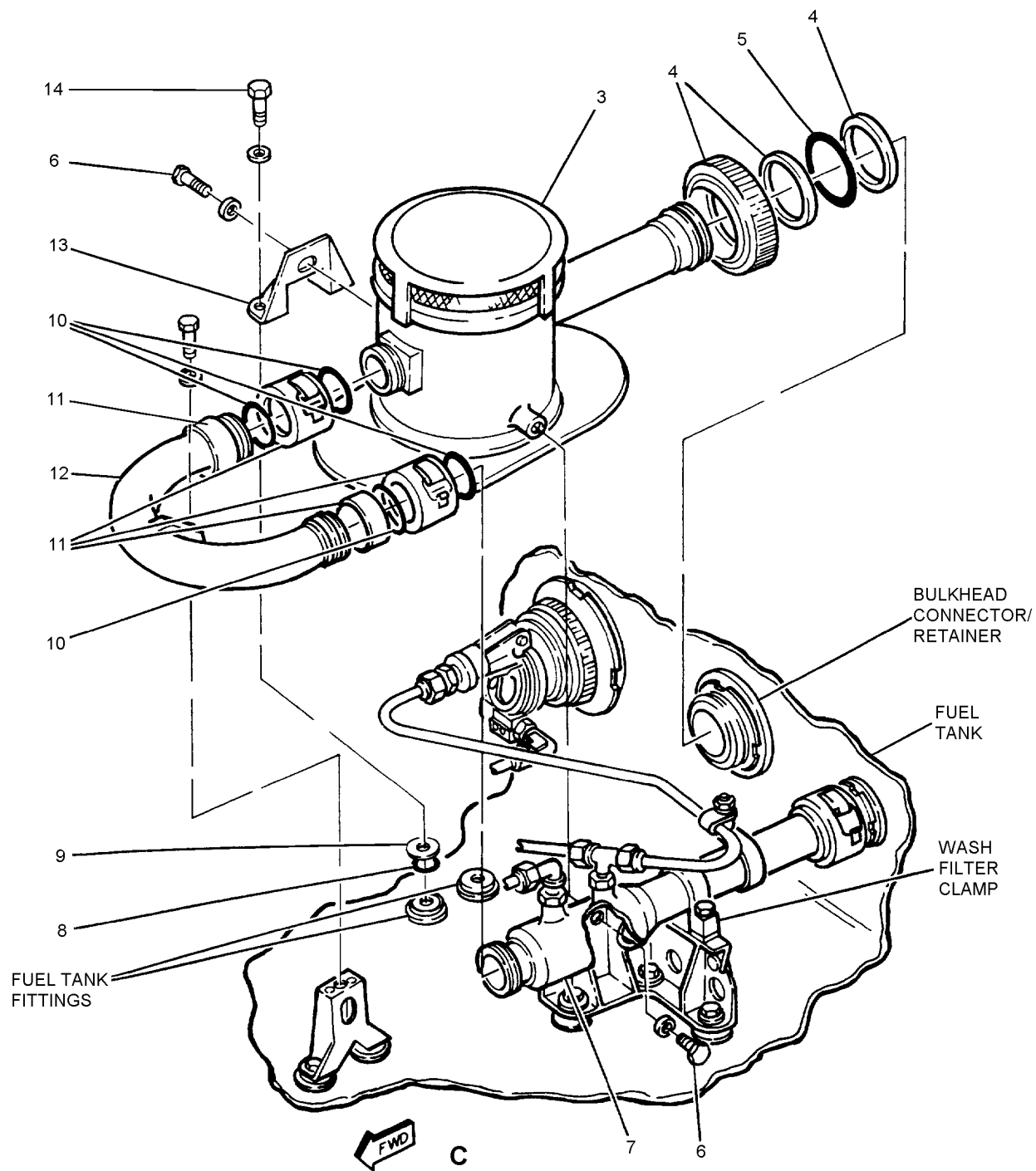


Figure 1. No. 2 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP599) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 2 FUEL TANK ENGINE FUEL BOOST JET			
		EJECTOR (5BAP599)			
1	74A586247-1029	. COVER ASSY (76301) (FOR REPAIR SEE	1		XBOOO
		WP020 05)			
	NAS673V4	. BOLT (AP)	39		PAOZZ
	AN960JD10L	. WASHER (AP)	39		PAOZZ
2	74A586299-1005	. TUBE ASSEMBLY, METAL - SCAV MF,	1		MGOZZ
		Y406 TEE - Y397 PUMP (76301)			
		(SUPERSEDES 74A586299-1003)			
3	2800099-104	. EJECTOR, JET ENGINE FUEL BOOST PUMP	1		PAOZZ
		(NO. 2 FUEL TANK ENGINE FUEL BOOST			
		JET EJECTOR) (92003) (MCDONNELL SPEC			
		74-580112-209) (5BAP599)			
4	W702-32D	. NUT ASSEMBLY, TUBE COUPLING (79326)	1		PAOZZ
		(MCDONNELL SPEC ST7MI91-32D)			
		(INCLUDES NUT AND 2 WASHERS)			
5	MS29513-334	. PACKING	1		PAOZZ
6	NAS674V2	. BOLT	2		PAOZZ
	AN960JD416	. WASHER (USE WITH INDEX 6)	2		PAOZZ
7	74A586268-1003	. FILTER, FLUID PRESSURE - FUEL WASH	1		PAOZZ
		(NO. 2 FUEL TANK WASH FILTER)			
		(76301)			
8	M25988/1-312	. PACKING	2		PAOZZ
9	74A586244-2007	. WASHER (76301) (RETAINER)	2		PAOZZ
10	MS29513-222	. PACKING	4		PAOZZ
11	W901K24DE	. COUPLING, CLAMP, GROOVED (79326)	2		PAOZZ
		(MCDONNELL SPEC 7M765-24D)			
		(INCLUDES SLEEVE)			
	14J12-24A	. COUPLING, CLAMP, GROOVED (24984)	2		PAOZZ
		(MCDONNELL SPEC 7M765-24D)			
		(INCLUDES SLEEVE)			
	W901F24DE	. COUPLING, CLAMP, GROOVED (79326)	2	*	PAOZZ
		(MCDONNELL SPEC 7M550-24D)			
		(INCLUDES SLEEVE)			
12	74A586269-1003	. TUBE ASSEMBLY, METAL - FUEL BOOST	1		XBOZZ
		PMP MOTIVE FL TK NO. 2 (76301)			
	NAS673V3	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
13	74A586662-2003	. SUPPORT, FUEL PUMP - MAIN EJECTOR,	1		XBOZZ
		TANK NO. 3 (76301)			
14	NAS674V2	. BOLT	2		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 14)	2		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

Figure 1. No. 2 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP599) (Sheet 4)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
NO. 2 FUEL TANK ENGINE FUEL TURBINE BOOST PUMP (5BAP679)
ENGINE FUEL SUPPLY SYSTEM
EFFECTIVITY: 161924 AND UP; ALSO 161353 THRU 161761 AFTER
F/A-18 AFC 18 AND F/A-18 AFC 53

Reference Material

Fuel System	A1-F18AC-460-300
No. 2 Fuel Tank Access Cover	WP005 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer, and Engine Fuel Supply System Test	WP012 00
Line Maintenance Procedures	A1-F18AC-LMM-000
Structural Hardware	NAVAIR 01-1A-8

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Installation	3
Removal	3

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 18	-	Incorporation of Fuel Turbine Boost Pump/ Sealing of Raised Baffle in Fuel Tanks 2 and 3 (ECP MDA-F/A-18-00077C1/C2)	15 Jul 86	-
F/A-18 AFC 53	-	Elimination of Tanks 1 and 4 Sneak Circuit, Tank 4 Motive Flow Shut Off Valve, and Raised Inverted Baffle (ECP MDA-F/ A-18-00055/C1)	15 Jul 86	-

1. TURBINE PUMP.

Support Equipment Required

None



Petrolatum

1

Materials Required

Nomenclature	Specification or Part Number
Packing (3)	MS29513-222
Packing (3)	MS29513-230
Petrolatum, Technical	VV-P-236 (CAGE 81348)

2. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove tube (1, figure 1, detail A).
- c. Remove cover (2, detail B) and attaching parts.
- d. Remove support (3, detail C) and attaching parts.
- e. Remove bolt (19, detail E) and disconnect clamp (20 or 25).
- f. Remove coupling (16, detail D), tube (17), bolts (18), and attaching parts.
- g. Remove bolts (11) and disconnect lead (10).
- h. Remove coupling (14), tube (12), and packings (13).

NOTE

The turbine pump is mounted on guide pins.
Pump must be pulled straight up to clear guide pins.

- i. Remove turbine pump (7) and attaching parts.

3. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).

- b. Lubricate new packings with petrolatum.
- c. Prepare mating surfaces of bolt (11, figure 1, detail D), lead (10), and flange of tube (12) for electrical bond (A1-F18AC-LMM-000).
- d. Install tube (12), coupling (14), and packings (13).
- e. Align turbine pump (7) with guide pins.
- f. Install turbine pump (7). On 161924 THRU 162444, install bolts (4). On 162445 AND UP, install bolts (5 and 6).
- g. Install bolts (11) and lead (10).
- h. Install packings (15).
- i. Install tube (17), coupling (16), bolts (18), and attaching parts.
- j. Install clamp (20 or 25, detail E), bolt (19), and attaching parts.
- k. Install support (3, detail C) and attaching parts.
- l. Install cover (2, detail B) and attaching parts.
- m. Install tube (1, detail A).
- n. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)
- o. Install no. 2 fuel tank access cover (WP005 00).
- p. Connect utility and emergency battery connectors (WP013 00).
- q. Do internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

4. TURBINE PUMP BRACKET.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (as required)	M25988/1-312
Petrolatum, Technical	VV-P-236 (CAGE 81348)

5. REMOVAL.

a. Remove bolts (6, figure 2) and attaching parts, bracket (1), and packings (7).

b. Remove bolts (15, detail A) and attaching parts, bracket (8 or 17), and packings (16).

6. INSTALLATION.

Petrolatum

1

a. Lubricate new packings with petrolatum.

b. Install bracket (1, figure 2) per substeps below:

(1) Seal bolts (6) per WP013 00.

(2) Install packings (7), bracket (1), bolts (6) and attaching parts.

c. Install bracket (8 or 17, detail A) per substeps below:

(1) Seal bolts (15) per WP013 00.

(2) Install packings (16), bracket (8 or 17), bolts (15), and attaching parts.

7. INSPECTION.**Support Equipment Required**

None

Materials Required

None

a. Inspect bracket (1, figure 2), bracket (8 or 17, detail A), per substeps below:

(1) Cracks.

(2) Corrosion.

(3) Sharp edges that could damage tank.

(4) Stripped plate nut.

(5) Loose rivets.

8. REPAIR.**Support Equipment Required**

None

Materials Required

None

NOTE

Repair of brackets (1, 8, or 17, figure 2, detail A) is limited to replacement of plate nuts, spacers and rivets.

9. DISASSEMBLY.

a. If damaged, remove bracket (1, figure 2), bracket (8 or 17, detail A) per paragraph 5.

b. If damaged, remove plate nuts (3, 4, figure 2, 10, 12, 13, 21, 25 or 26, detail A) and rivets per NAVAIR 01-1A-8.

c. If damaged, remove spacers (2, figure 2, 14, 23, or 24, detail A) and rivets per NAVAIR 01-1A-8.

10. ASSEMBLY.

a. Install plate nuts (3, 4, figure 2, 10, 12, 13, 21, 25, or 26, detail A) and rivets per NAVAIR 01-1A-8.

b. Install spacer (2, figure 2, 14, 23, or 24, detail A) and rivets per NAVAIR 01-1A-8.

c. Install bracket (1, figure 2, 8 or 17, detail A) per paragraph 8.

11. ILLUSTRATED PARTS BREAKDOWN.

12. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

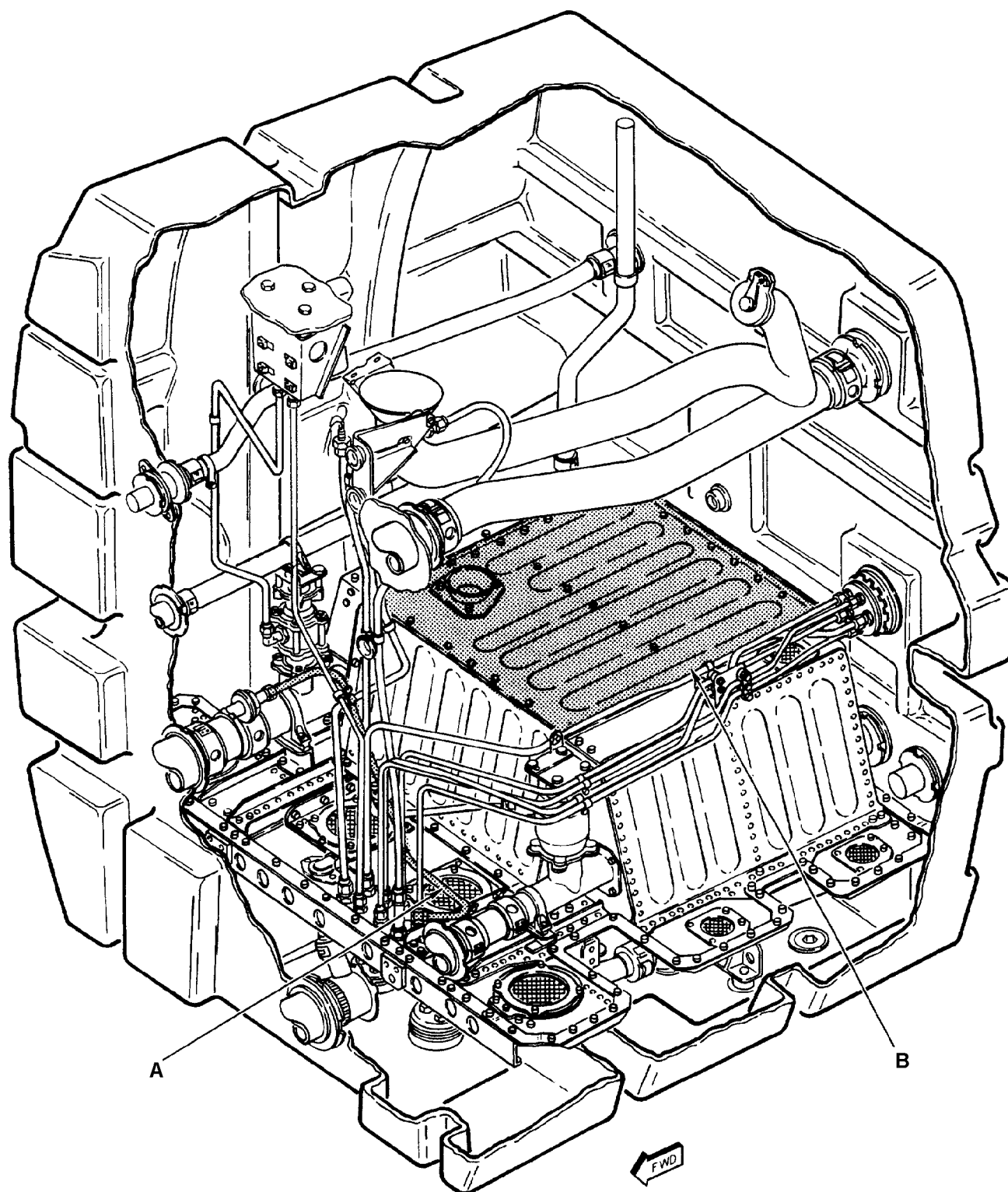


Figure 1. No. 2 Fuel Tank Engine Fuel Turbine Boost Pump (5BAP679) (Sheet 1)

1330301A

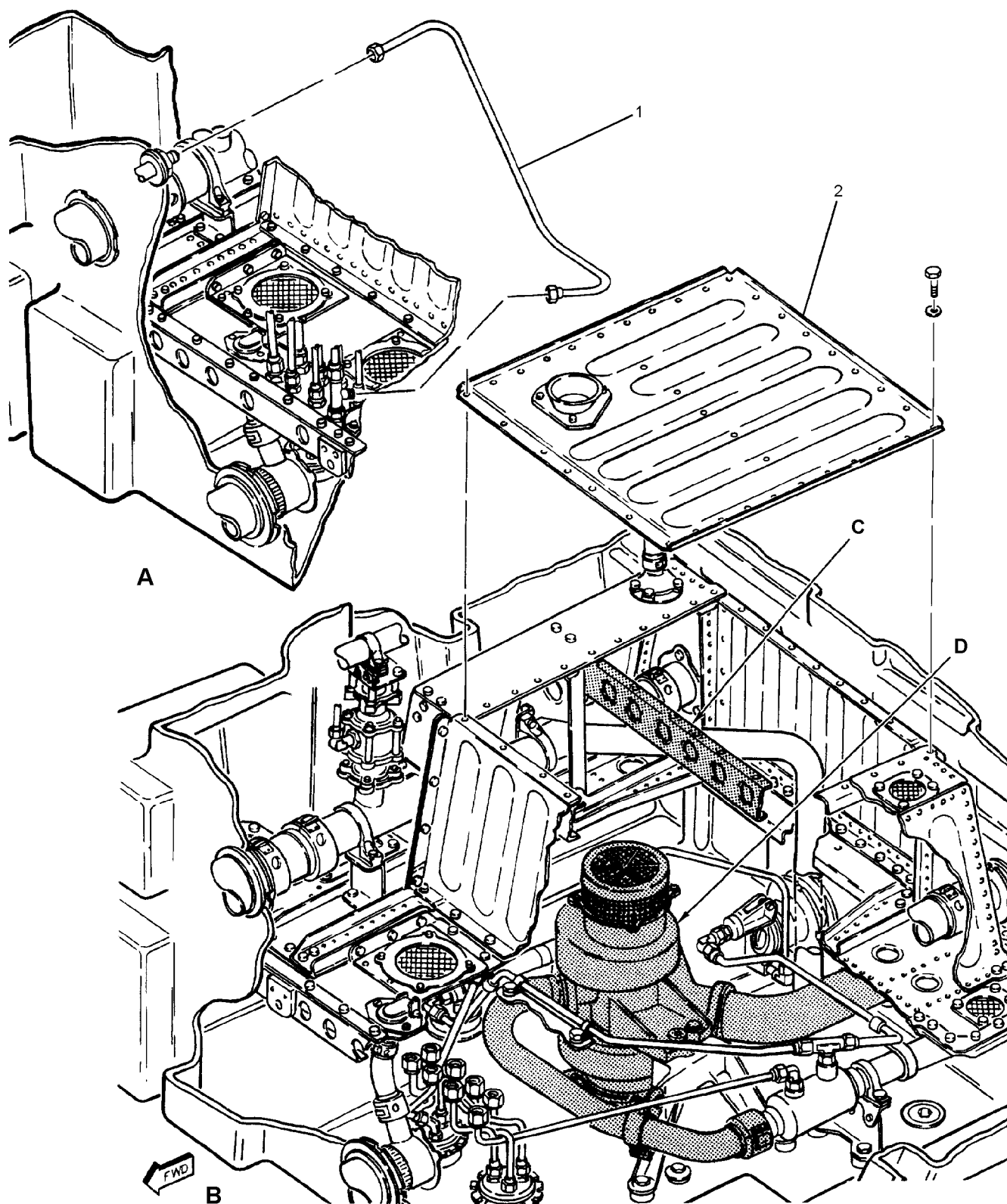


Figure 1. No. 2 Fuel Tank Engine Fuel Turbine Boost Pump (5BAP679) (Sheet 2)

1330301B

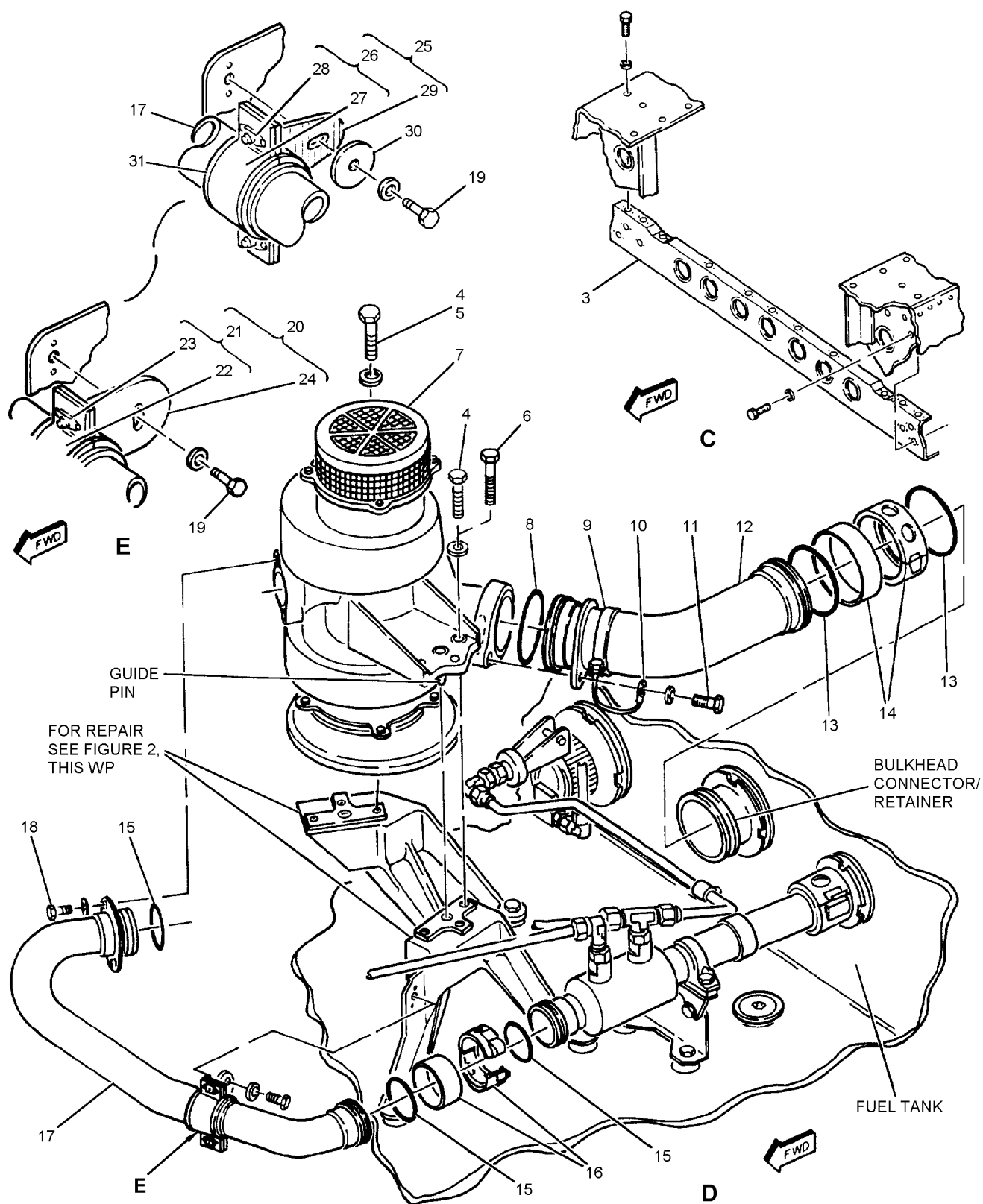


Figure 1. No. 2 Fuel Tank Engine Fuel Turbine Boost Pump (5BAP679) (Sheet 3)

1330301C

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 2 FUEL TANK ENGINE FUEL TURBINE			
		BOOST PUMP (5BAP679)			
1	74A586299-1005	. TUBE ASSEMBLY, METAL - SCAV MF,	1		MGOZZ
		Y406 TEE - Y397 PUMP (76301)			
		(SUPERSEDES 74A586299-1003)			
2	74A586247-1049	. COVER ASSY (76301) (FOR REPAIR SEE	1		XBOOO
		WP020 05)			
	NAS673V4	. BOLT (AP)	39		PAOZZ
	AN960JD10L	. WASHER (AP)	39		PAOZZ
3	74A586247-1003	. SUPPORT ASSY (76301) (FOR REPAIR	1		XBOOO
		SEE WP020 05)			
4	NAS674V15	. BOLT	6	C	PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 4)	6	C	PAOZZ
5	NAS674V15	. BOLT	3	D	PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 5)	3	D	PAOZZ
6	NAS674V17	. BOLT	3	D	PAOZZ
	AN960JD416	. WASHER (USE WITH INDEX 6)	3	D	PAOZZ
	NAS673V4	. BOLT (AP)	6		PAOZZ
	AN960JD10L	. WASHER (AP)	6		PAOZZ
7	5007006C	. PUMP, TURBINE DRIVEN (NO. 2 FUEL	1		PAODD
		TANK ENGINE FUEL TURBINE BOOST			
		PUMP) (99167) (MCDONNELL SPEC			
		74-580168-101) (5BAP679) (REPLACES			
		5007006B)			
	5007006B	. SEE ABOVE (REPLACED BY 5007006C)	1	*	PAODD
		(USE UNTIL EXHAUSTED)			
8	MS29513-230	. PACKING	1		PAOZZ
9	AN735D40	. CLAMP	1		PAOZZ
10	MS25083-2BC6	. LEAD, ELECTRICAL	1		PAOZZ
11	NAS673V5	. BOLT	1		PAOZZ
	AN960JD10L	. WASHER (USED WITH INDEX 11)	2		PAOZZ
	NAS1291C3M	. NUT (USED WITH INDEX 11)	1		PAOZZ
12	74A587118-1001	. TUBE ASSEMBLY, METAL - TURBO FUEL	1		XBOZZ
		PUMP TO BLKH3 (76301)			
	NAS674V4	. BOLT (AP)	2		PAOZZ
	4M36-02069	. WASHER, FLAT (AP)	2		PAOZZ
13	MS29513-230	. PACKING	2		PAOZZ
14	W901K40DE	. COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	14J12-40A	. SEE ABOVE (24984)	1		PAOZZ
	W901F40DE	. SEE ABOVE (79326) (MCDONNELL SPEC	1	*	PAOZZ
		7M550-40D)			
15	MS29513-222	. PACKING	3		PAOZZ
16	W901K24DE	. COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-24D)			
		(INCLUDES SLEEVE)			
	14J12-24A	. SEE ABOVE (24984)	1		PAOZZ
	W901F24DE	. SEE ABOVE (79326) (MCDONNELL SPEC	1	*	PAOZZ
		7M550-24D)			
17	74A587102-1005	. TUBE ASSEMBLY, METAL - TURBO DRIVE	1		XBOZZ
		FUEL, TURBO PUMP, TANK 2 (76301)			
		(SUPERSEDES 74A587102-1001 AND			
		74A887102-1003)			
18	NAS674V4	. BOLT	2		PAOZZ
	4M36-02069	. WASHER, FLAT (76301) (USE WITH INDEX 18) . . .	2		PAOZZ
19	NAS674V5	. BOLT	1		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 19)	1		PAOZZ

Figure 1. No. 2 Fuel Tank Engine Fuel Turbine Boost Pump (5BAP679) (Sheet 4)

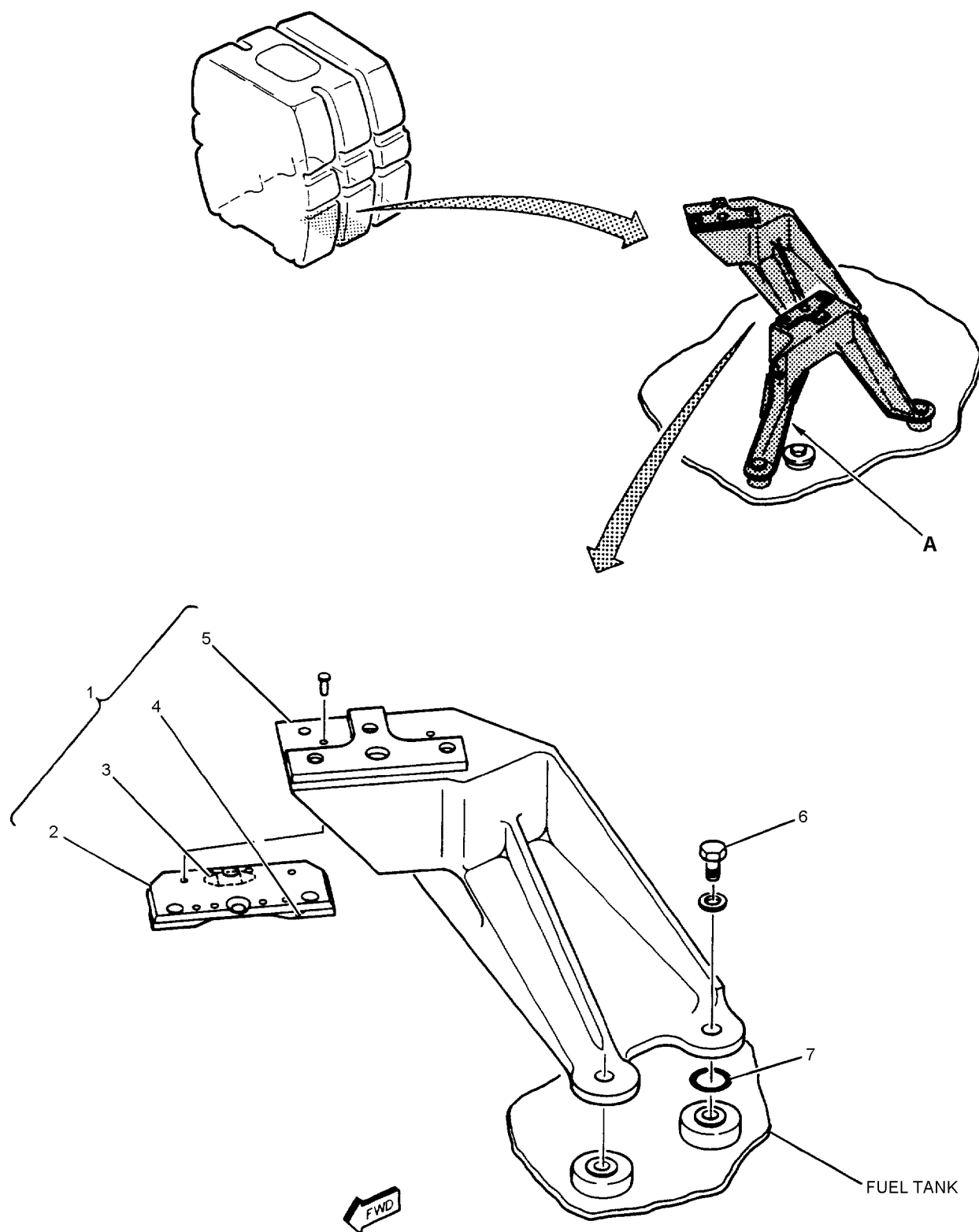
INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
20	74A586750-1001	.	CLAMP - FUEL LINE, MOTIVE FLOW TO	.....					1	A	XBOOO
			TURBO PUMP (76301)								
21	74A586750-2001	.	CLAMP ASSY (HALF) (76301)	.....					1		AOOOO
22	74A586750-2005	.	STRAP, RETAINING (76301)	.....					1		PAOZZ
23	MS21060L3	.	NUT, PLATE	.....					2		PAOZZ
	MS20426AD3 #	.	RIVET (AP)	.....					2		-
24	74A586750-2003	.	CLAMP (HALF) (76301)	.....					1	A	PAOZZ
	NAS673V4	.	BOLT (AP)	.....					2		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					2		PAOZZ
25	74A586750-1003	.	CLAMP - FUEL LINE, MOTIVE FLOW TO	.....					1	B	XBOOO
			TURBO PUMP (76301)								
26	74A586750-2001	.	CLAMP ASSY (HALF) (76301)	.....					1		AOOOO
27	74A586750-2005	.	STRAP, RETAINING (76301)	.....					1		PAOZZ
28	MS21060L3	.	NUT, PLATE	.....					2		PAOZZ
	MS20426AD3 #	.	RIVET (AP)	.....					2		-
29	74A586750-2007	.	CLAMP (HALF) (76301)	.....					1	B	PAOZZ
	NAS673V4	.	BOLT (AP)	.....					2		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					2		PAOZZ
30	74A586750-2009	.	WASHER (76301)	.....					1	B	PAOZZ
31	74A586750-2011	.	CUSHION (76301)	.....					2	B	PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

CODE	USABLE ON	MODEL
A	161924 THRU 162414	F/A-18A/B
B	162415 & UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 18	F/A-18A/B
C	161924 THRU 162444	F/A-18A/B
D	162445 & UP	F/A-18A/B

Figure 1. No. 2 Fuel Tank Engine Fuel Turbine Boost Pump (5BAP679) (Sheet 5)



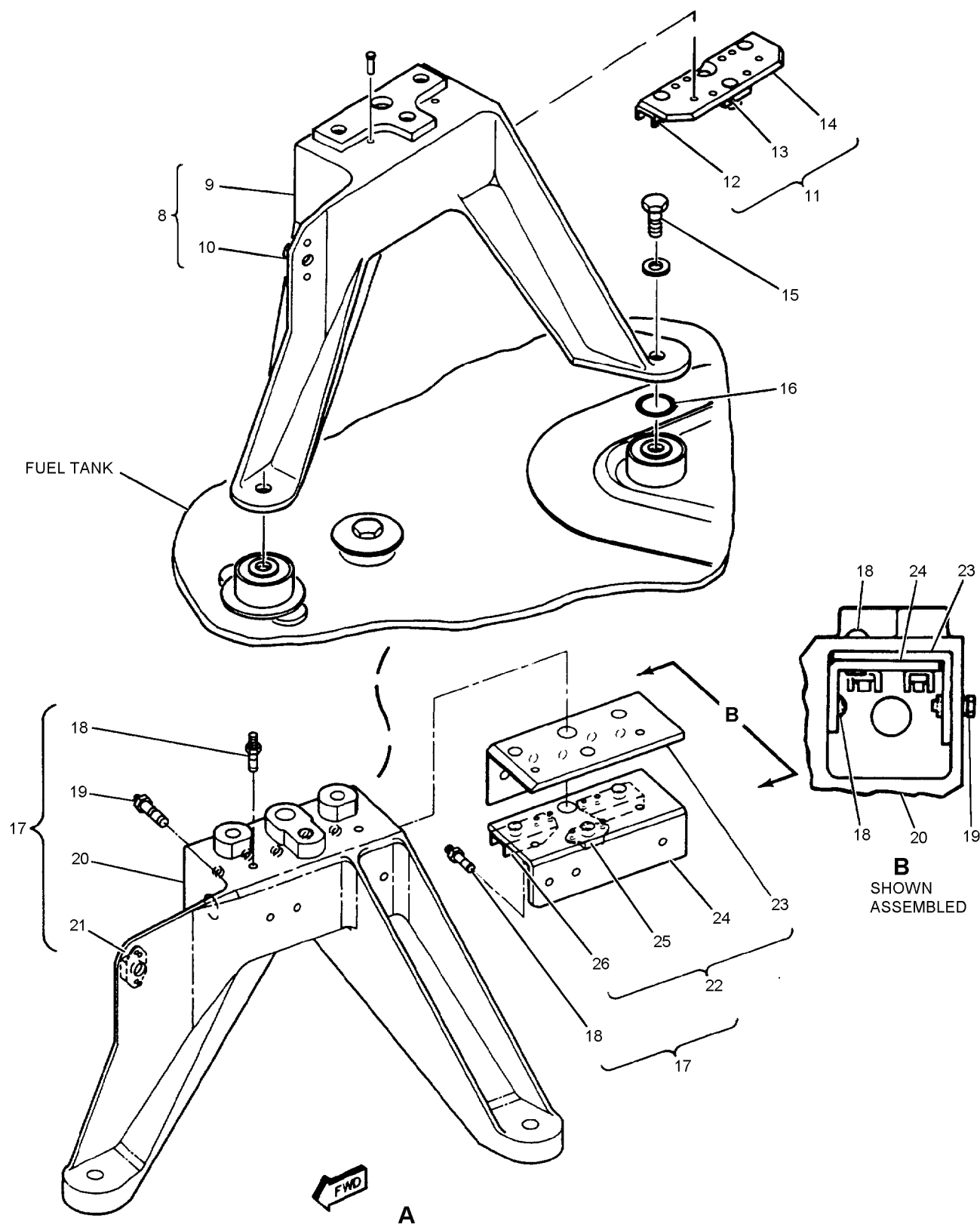


Figure 2. No. 2 Fuel Tank Engine Fuel Turbine Boost Pump Brackets (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 2 FUEL TANK ENGINE FUEL TURBINE			
		BOOST PUMP BRACKETS			
1	74A587101-1001	. BRACKET ASSEMBLY - RH, TURBO BOOST	1		XBOOO
		PUMP, FUEL TANK NO. 2 (NO. 2 FUEL			
		TANK ENGINE FUEL TURBINE BOOST			
		PUMP BRACKET ASSEMBLY) (76301)			
2	74A587123-1001	. SPACER ASSEMBLY, PLATE NUT -	1		XBOOO
		MOUNTING BRACKET (76301)			
	MS20470AD5 #	. RIVET (AP)	1		-
3	MS21060L4	. NUT, PLATE	1		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
4	MS21062L4	. NUT, PLATE	2		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
5	74A587101-2001	. BRACKET (76301)	1		XBOZZ
6	NAS674V3	. BOLT	2		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 6)	2		PAOZZ
7	M25988/1-312	. PACKING	2		PAOZZ
8	74A587100-1001	. BRACKET ASSEMBLY - LH, TURBO BOOST	1	A	XBOOO
		PUMP, FUEL TANK NO. 2 (NO. 2 FUEL			
		TANK ENGINE FUEL BOOST JET			
		EJECTOR BRACKET ASSEMBLY) (76301)			
9	74A587100-2007	. BRACKET (76301) (SUPERSEDES	1		XAOZZ
		74A587100-2001)			
10	MS21060L4	. NUT, PLATE	1		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
11	74A587123-1001	. SPACER ASSEMBLY, PLATE NUT -	1	A	XBOOO
		MOUNTING BRACKET (76301)			
	MS20470AD5 #	. RIVET (AP)	2		-
12	MS21062L4	. NUT, PLATE	2	A	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
13	MS21060L4	. NUT, PLATE	1	A	PAOZZ
	MS20426AD3	. RIVET (AP)	2		-
14	74A587123-2001	. BRACKET (76301)	1	A	XBOZZ
15	NAS673V3	. BOLT	2		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 15)	2		PAOZZ
16	M25988/1-312	. PACKING	2		PAOZZ
17	74A587100-1007	. BRACKET ASSEMBLY - LH, TURBO BOOST	1	B	XBOOO
		PUMP, FUEL TANK NO. 2 (NO. 2 FUEL			
		TANK ENGINE FUEL TURBINE BOOST			
		PUMP BRACKET ASSEMBLY) (76301)			
18	PLT270-5C-4	. RIVET, BLIND (92215) (MCDONNELL	5	B*	PAOZZ
		SPEC ST3M790-08-4)			
	BL7-08-4	. SEE ABOVE (73197)	5	B*	PAOZZ
19	PLT270-6-4	. RIVET, BLIND (92215) (MCDONNELL SPEC	5	B*	PAOZZ
		ST3M790-3-4			
	BL7-3-4	. SEE ABOVE (73197)	5	B*	PAOZZ
20	74A587100-2003	. BRACKET (76301)	1	B	XAOZZ
21	MS21060L4	. NUT, PLATE	1	B	PAOZZ
	MS20470AD3 #	. RIVET (AP)	2		-
22	74A587100-2009	. SPACER ASSY (76301)	1	B	XBOOO
23	74A587123-2011	. SPACER	1	B	XBOZZ
24	74A587123-2013	. SPACER	1	B	XBOZZ
25	MS21060L4	. NUT, PLATE	1	B	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
26	MS21062L4	. NUT, PLATE	2	B	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-

**Figure 2. No. 2 Fuel Tank Engine Fuel Turbine Boost
Pump Brackets (Sheet 3)**

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

* ALTERNATE OR EQUIVALENT PARTS (WP 002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

CODE	USABLE ON	MODEL
A	161924 THRU 162444	F/A-18A/B
B	162445 AND UP	F/A-18A/B

**Figure 2. No. 2 Fuel Tank Engine Fuel Turbine Boost
Pump Brackets (Sheet 4)**

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 3 FUEL TANK ENGINE FUEL BOOST JET EJECTOR (5BAP591)

ENGINE FUEL SUPPLY SYSTEM

Title	WP Number
No. 3 Fuel Tank Engine Fuel Boost Jet Ejector - 161353 THRU 161715 BEFORE	
F/A-18 AFC 18 AND F/A-18 AFC 53	134 01
No. 3 Fuel Tank Engine Fuel Boost Jet Ejector - 161716 THRU 161761 BEFORE	
F/A-18 AFC 18 AND F/A-18 AFC 53	134 02

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 3 FUEL TANK ENGINE FUEL BOOST JET EJECTOR (5BAP591)

ENGINE FUEL SUPPLY SYSTEM

EFFECTIVITY: 161353 THRU 161715 BEFORE F/A-18 AFC 18
AND F/A-18 AFC 53

Reference Material

Fuel System	A1-F18AC-460-300
No. 3 Fuel Tank Access Cover	WP006 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer and Engine Fuel Supply System Test	WP012 00
Line Maintenance Procedures	A1-F18AC-LMM-000

Alphabetical Index

Subject	Page No.
Illustrated Parts Breakdown	3
Installation	2
Removal	2

Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required (Cont)

Materials Required		Nomenclature	Specification or Part Number
Nomenclature	Specification or Part Number	Packing (5)	MS29513-226
		Packing (6)	MS29513-230
		Packing	MS29513-330
		Petrolatum, Technical	VV-P-236 (CAGE 81348)
Packing (4)	MS29513-222		

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove coupling (3, figure 1, detail A), packings (2), and tube (1).
- c. Remove main vent assembly (4), couplings (3), and packings (2).
- d. Remove probe guide (17, detail B) and attaching parts.
- e. Disconnect clamps (15, 18, and 19) and remove couplings (7) and packings (6).
- f. Disconnect tube (12).
- g. Remove manifold (9) and attaching parts.
- h. Remove screen (27, detail C) and attaching parts.
- i. Remove or loosen bolts (23 and 24) and attaching parts, as required, for removal of webs (22 and 29).
- j. Disconnect tubes (13 and 26) and remove webs (22 and 29).
- k. Remove support (35, detail E), bolts (34), and washers.
- l. Remove couplings (41, detail G), clamp (50), rotate tube (49) up and remove packings (40) and attaching parts.
- m. Remove nut (46) and packing (47).
- n. Remove jet ejector (44) and attaching parts.

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings with petrolatum.

WARNING

To prevent fuel system malfunction during inverted flight, shuttle inside ejector must move freely from top to bottom.

- c. Turn ejector (44, figure 1, detail G) upside down, then right side up and make sure shuttle inside ejector moves freely from top to bottom. (QA)
- d. Inspect ejector (44) and make sure top and bottom screens do not have damage which could restrict movement of shuttle inside ejector. (QA)
- e. Prepare mating surfaces of clamp (50), ejector (44) and supports (43, 48, and 51) for electrical bond (A1-F18AC-LMM-000).
- f. Install nut assembly (46), packing (47), jet ejector (44), and attaching parts. Handtighten nut (46).
- g. Install tube (49), packings (40), couplings (41) and clamp (50) and attaching parts.
- h. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)
- i. Install zee (35, detail E), bolts (34), and washers.
- j. Inspect for and remove any foreign objects from below baffle area. (QA)
- k. Install web (22, details C and F), bolts (23 and 24), and washers. Make sure web (22) is between beam and fuel tank and on top of webs (31 and 33).
- l. Install web (29), bolts (23 and 24), and washers. Make sure web (29) is between beam and fuel tank and under webs (28 and 30).
- m. Prepare mating surfaces of screen (27, detail C) and baffle for electrical bond. Install screen (27) and attaching parts.
- n. Connect tubes (13 and 26).
- o. Prepare mating surfaces of manifold (9, detail B) and webs (22 and 20), for electrical bond (A1-F18AC-LMM-000).
- p. Install packings (6), manifold (9), couplings (7), bolts (10), and attaching parts.

q. Install clamps (15, 18, and 19), bolts (10 and 14), and washers.

r. Connect tube (12).

s. Install probe guide (17) and attaching parts.

t. Install main vent assembly (4, detail A), couplings (3), and packings (2).

u. Install packings (2), coupling (3), and tube (1).

v. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)

w. Install no. 3 fuel tank access cover (WP006 00).

x. Connect both utility and emergency battery connectors (WP013 00).

y. Do internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

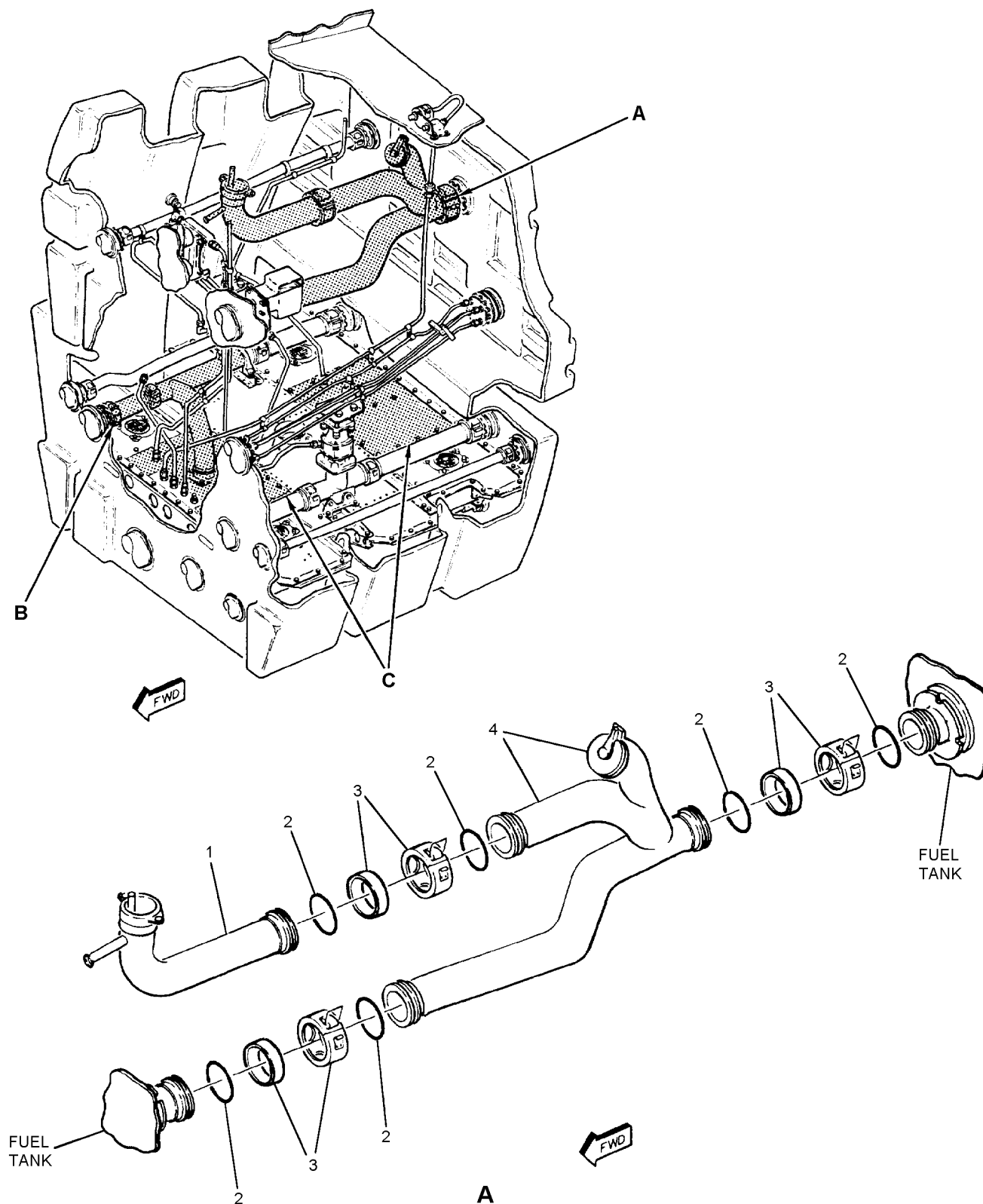
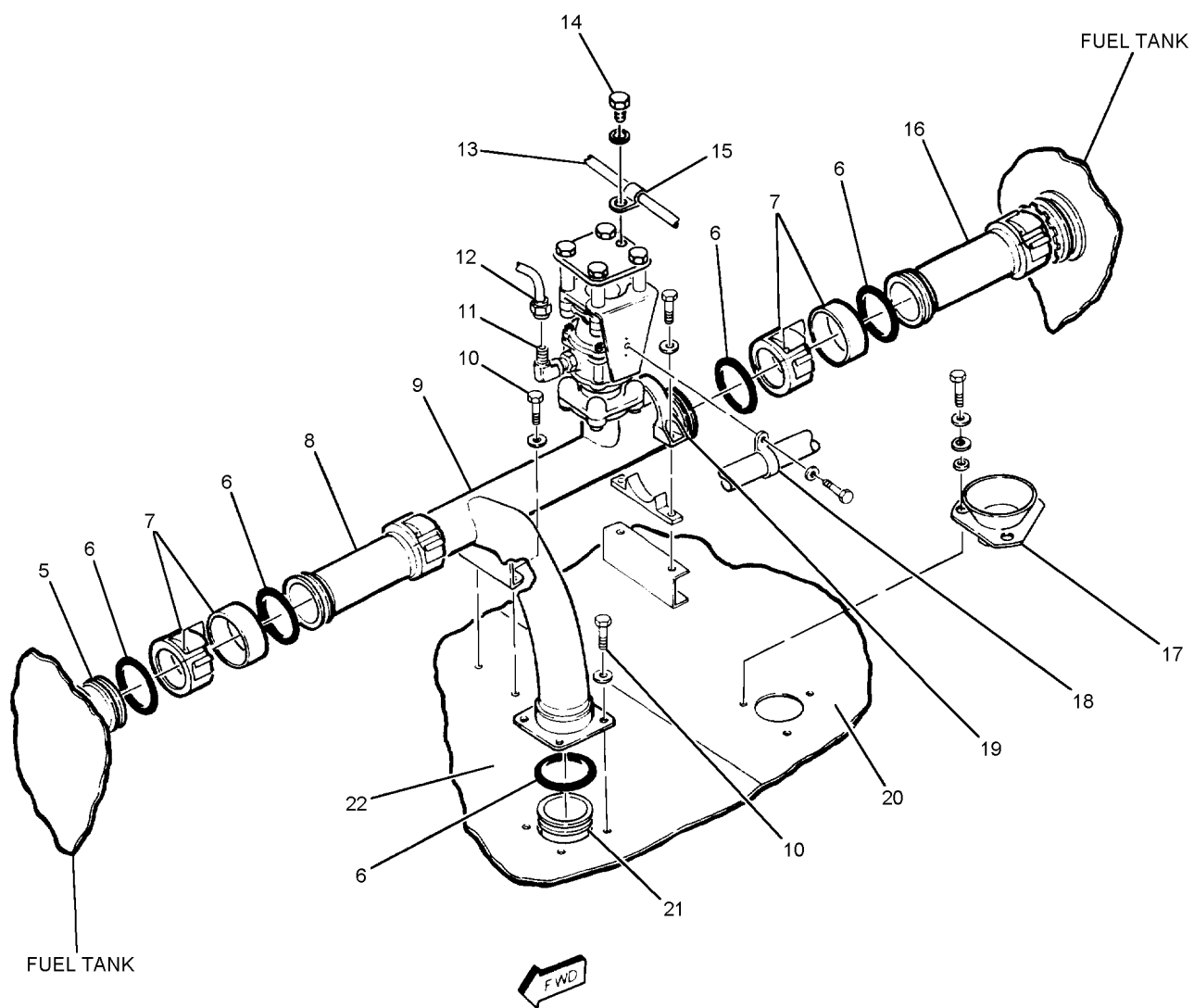


Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 1)



B

Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 2)

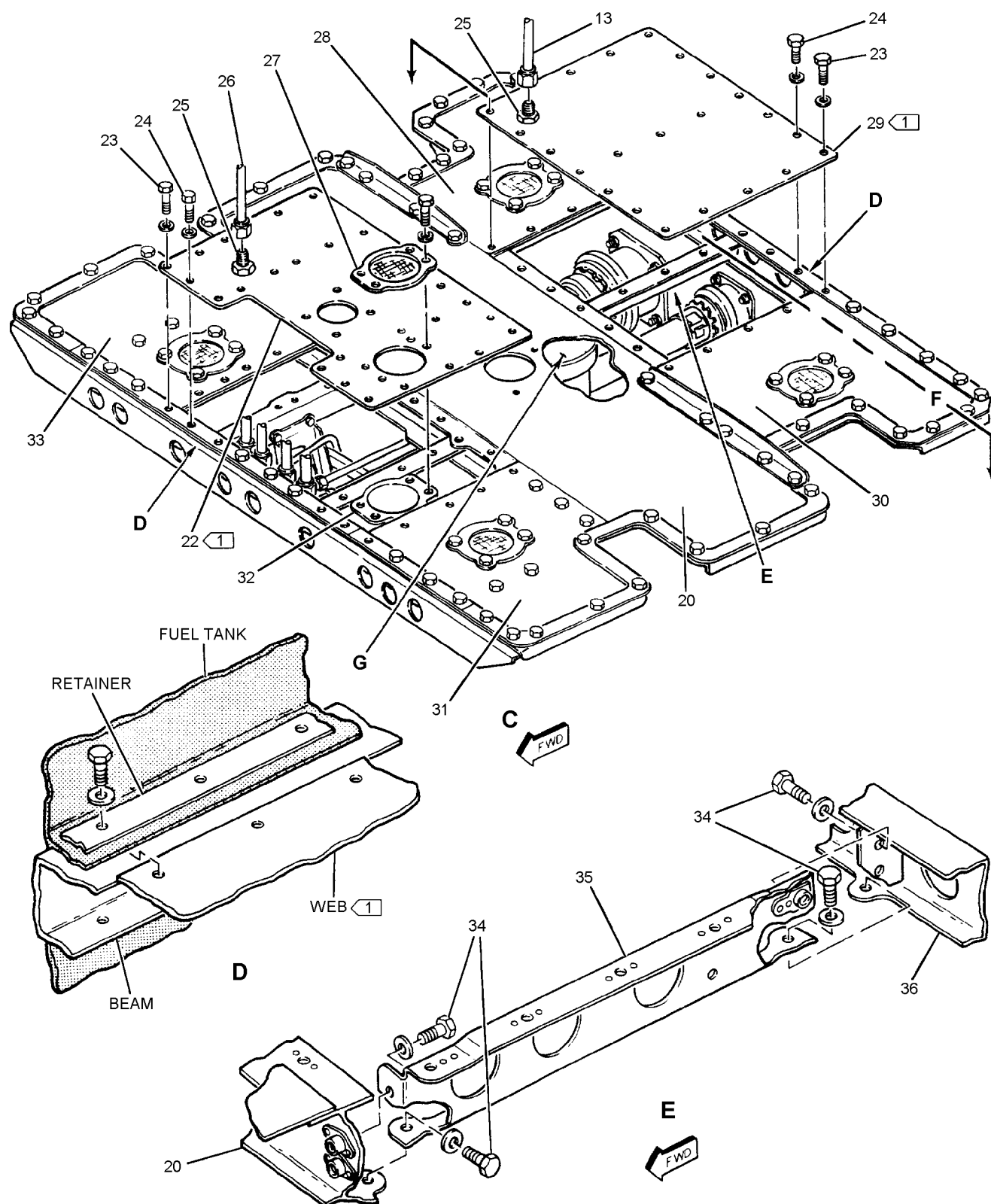
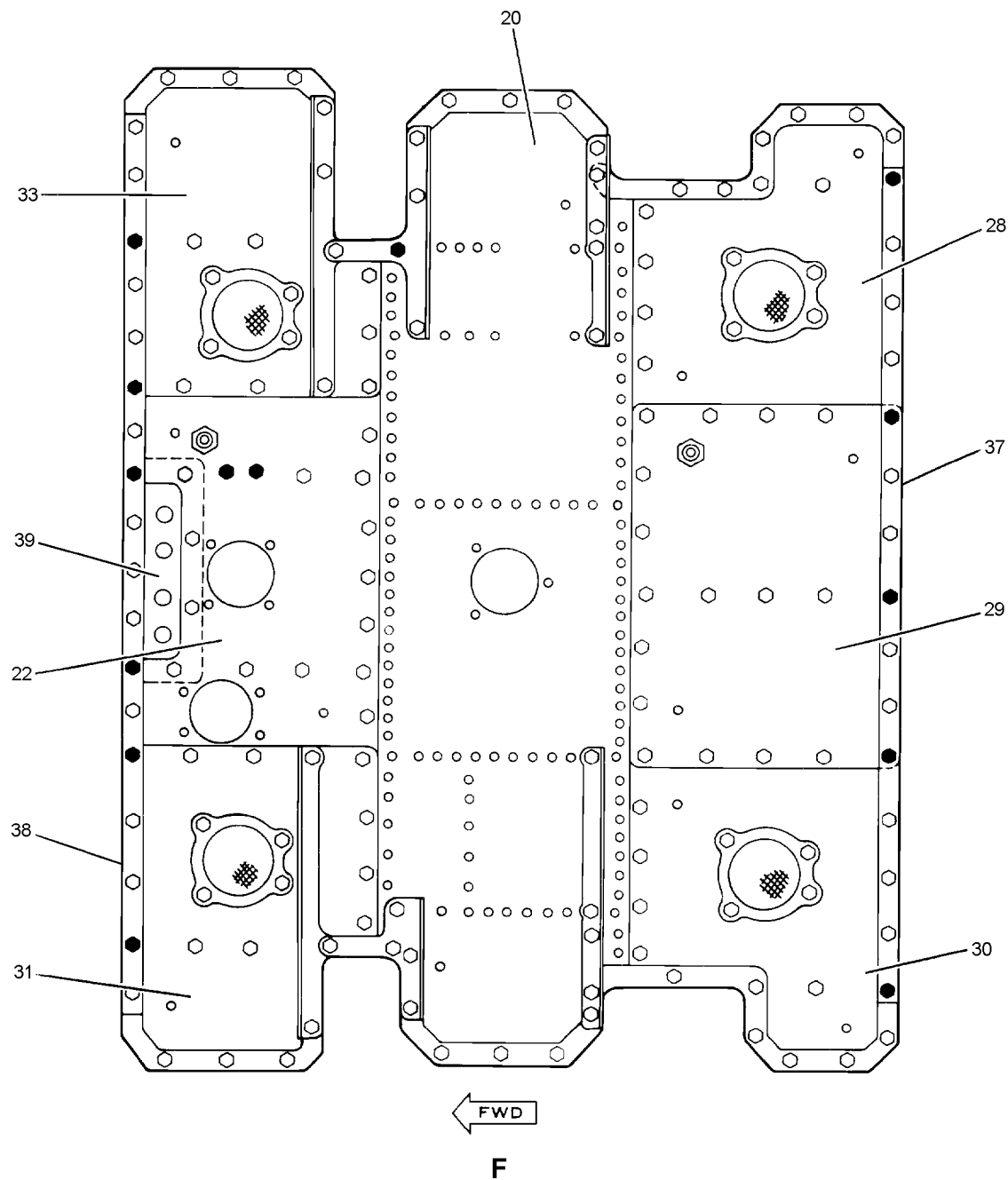


Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 3)

1340101C



INDEX	CODE	BOLT	WASHER
23	○	NAS673V6	AN960JD10L
24	●	NAS673V4	AN960JD10L

Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 4)

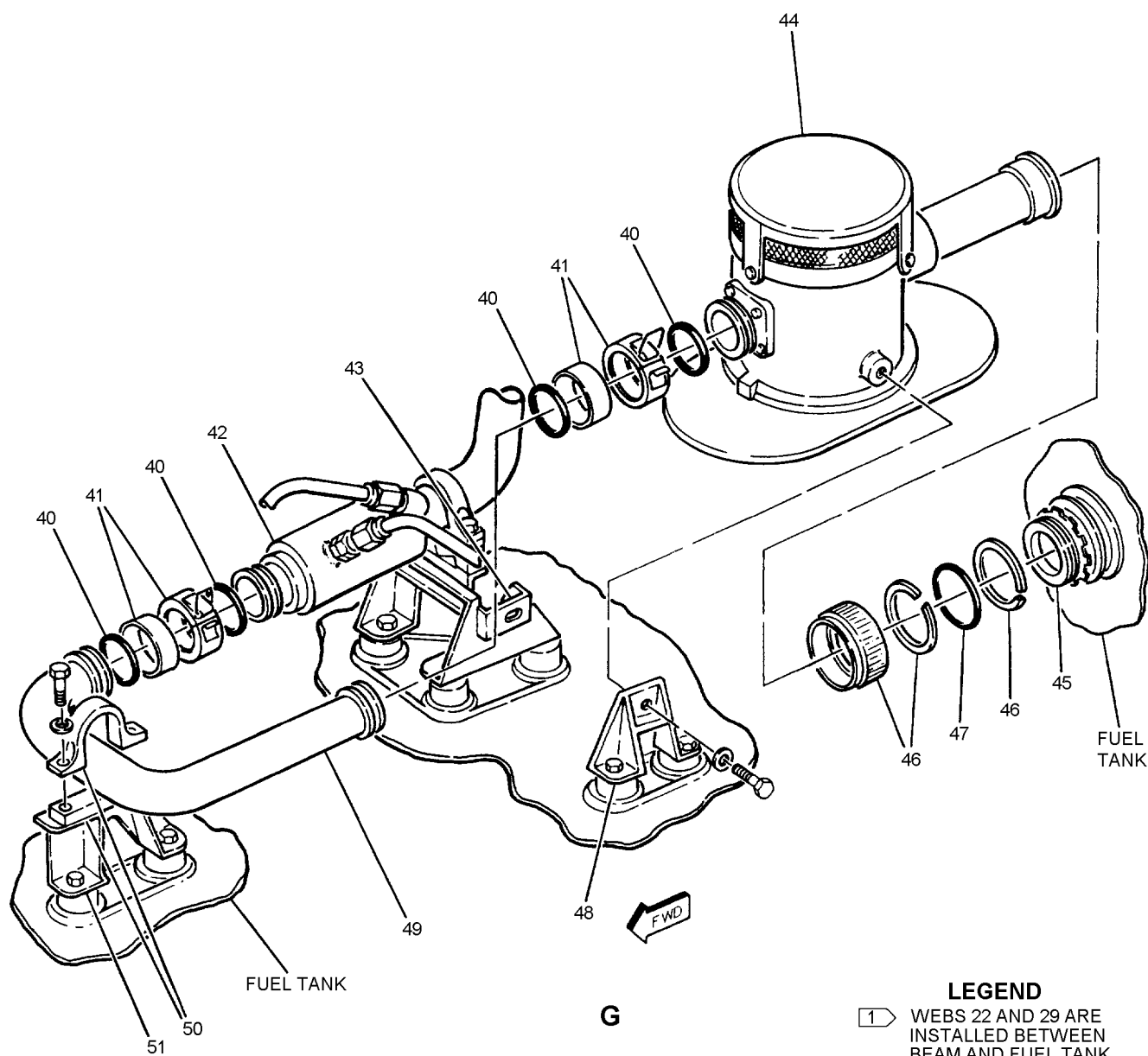


Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 3 FUEL TANK ENGINE FUEL BOOST JET			
		EJECTOR (5BAP591)			
1	74A586381-1001	. TUBE ASSY - CLIMB VENT, FUEL TANK	1		XBOOO
		NO. 3 (76301)			
	NS103597-02	. NUT, PLATE (80539) (MCDONNELL SPEC	2		PAOZZ
		ST3M470C3M) (USE WITH INDEX 1)			
	F10965-1-3	. SEE ABOVE (72962)	2	*	PAOZZ
	F29339-01-3	. SEE ABOVE (15653)	2	*	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
2	MS29513-230	. PACKING	6		PAOZZ
3	W901K40DE	. COUPLING, CLAMP, GROOVED (79326)	3		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	14J12-40A	. COUPLING, CLAMP, GROOVED (24984)	3		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	W901F40DE	. COUPLING, CLAMP, GROOVED (79326)	3	*	PAOZZ
		(MCDONNELL SPEC 7M550-40D)			
		(INCLUDES SLEEVE)			
	W901C40DE	. COUPLING, CLAMP, GROOVED (79326)	3	*	PAOZZ
		(MCDONNELL SPEC 7M550-40D)			
		(INCLUDES SLEEVE)			
4	74A585003-2001	. MAIN VENT ASSEMBLY (NO. 3 FUEL	1		PAOZZ
		TANK DIVE VENT CHECK VALVE)			
		(76301) (5VAP582)			
5	74A586214-2001	. CONNECTOR, TUBE, BULKHEAD - REFUEL	1		XBOZZ
		LINE, 2.00 DIA, Y419 (76301)			
6	MS29513-226	. PACKING	5		PAOZZ
7	W901K32DE	. COUPLING, CLAMP, GROOVED (79326)	3		PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE)			
	14J12-32A	. COUPLING, CLAMP, GROOVED (24984)	3		PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE)			
	W901F32DE	. COUPLING, CLAMP, GROOVED (79326)	3	*	PAOZZ
		(MCDONNELL SPEC 7M550-32D)			
		(INCLUDES SLEEVE)			
8	74A586324-1013	. TUBE ASSEMBLY, METAL - REFUEL	1		XBOZZ
		SYSTEM, TANK NO. 3 (76301)			
		(SUPERSEDES 74A586324-1009)			
9	74A586326-1005	. MANIFOLD, DEFUELING - TANK NO. 3	1		XBOZZ
		(76301)			
10	NAS673V2	. BOLT	6		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 10)	6		PAOZZ
11	7M637BW-6D	. ELBOW (76301)	1		PAOZZ
12	74A586341-1005	. TUBE ASSEMBLY, METAL - PILOT VALVE	1		MGOZZ
		RH PORT TO REFUEL V (76301)			
13	74A586314-1001	. TUBE ASSEMBLY, METAL - VENT, AFT,	1		MGOZZ
		INVERTED FLT COMPT, TK 3 (76301)			
14	NAS673V5	. BOLT	1		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 14)	1		PAOZZ
15	MS25281-R6	. CLAMP (SUPERSEDES MS25281-6)	1		PAOZZ

Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 6)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
16	74A586324-1011	. TUBE ASSEMBLY, METAL - PILOT VALVE RH PORT TO REFUEL V (76301) (SUPERSEDES 74A586324-1007)	1		XBOZZ
17	74A586297-2001	. GUIDE, PROBE - FUEL QTY, TANK 2 & 3 (76301)	1		XBOZZ
	NAS673V4	. BOLT (AP)	3		PAOZZ
	4M36-01016	. WASHER (AP) (76301)	6		PAOZZ
	NAS43DD3-8	. SPACER (AP)	3		PAOZZ
18	MS25281-R20	. CLAMP (SUPERSEDES MS25281-20)	1		PAOZZ
	NAS673V5	. BOLT (AP)	1		PAOZZ
	AN960JD10	. WASHER (AP)	2		PAOZZ
19	NAS1787A32G	. CLAMP	1		PAOZZ
	NAS673V9	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
20	74A586303-2563	. PANEL ASSY, CENTER (76031) (DOUBLE HINGE) (FOR REPAIR SEE WP024 04)	1		XBOOO
	74A586303-2547	. PANEL ASSY, CENTER (76301) (SINGLE HINGE) (FOR REPAIR SEE WP024 04)	1	*	XBOOO
	74A586303-2531	. PANEL ASSY, CENTER (76301) (FOR REPAIR SEE WP024 04)	1	*	XBOOO
21	74A586327-1007	. TUBE ASSEMBLY, METAL - DEFUEL, TANK NO. 3 (76301)	1		XBOZZ
22	74A586303-2535	. SKIN ASSY (WEB) (76301) (FOR REPAIR SEE W0024 04)	1		XBOOO
23	NAS673V6	. BOLT	AR		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 23)	AR		PAOZZ
24	NAS673V4	. BOLT	AR		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 24)	AR		PAOZZ
25	7M637BT-6D	. NIPPLE (76301)	2		PAOZZ
	AN832-6D	. NIPPLE	2	*	PAOZZ
26	74A586313-1001	. TUBE ASSEMBLY, METAL - VENT, FWD, INVERTED FLT COMPT, TK 3 (76301)	1		MGOZZ
27	74A586637-1005	. SCREEN ASSY - INVERTED FLIGHT BAFFLE, TANKS NO. 2 & 3 (76301)	1		XBOZZ
	NAS673V5	. BOLT (AP)	4		PAOZZ
	AN960JD10L	. WASHER (AP)	4		PAOZZ
28	74A586303-2335	. WEB ASSY (76301) (FOR REPAIR SEE WP024 04)	1		XBOOO
29	74A586303-2533	. SKIN ASSY (WEB) (76301)	1		XBOZZ
30	74A586303-2345	. WEB ASSY (76301) (FOR REPAIR SEE WP024 04)	1		XBOOO
31	74A586303-2343	. WEB ASSY (76301) (FOR REPAIR SEE WP024 04)	1		XBOOO
32	74A586312-1001	. TUBE ASSEMBLY, METAL - INVERTED FLT BAF, SURGE RLF, TK 3 (76301)	1		XBOOO
33	74A586303-2339	. WEB ASSY (76301) (FOR REPAIR SEE WP024 04)	1		XBOOO
34	NAS673V4	. BOLT	6		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 34)	6		PAOZZ
35	74A586303-2061	. ZEE ASSY (SUPPORT) (76301) (FOR REPAIR SEE WP024 04)	1		XBOOO
36	74A586303-2313	. BEAM ASSY (AFT) (76301) (FOR REPAIR SEE WP024 04)	1		XBOOO

Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejektor (5BAP591) (Sheet 7)

INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USE ON CODE	SM&R CODE
		1 2 3 4 5 6 7			
37	74A586303-2375	. RETAINER (76301)	1		XBOZZ
38	74A586303-2377	. RETAINER (FWD) (76301)	1		XBOZZ
39	74A586303-2077	. PLATE ASSY (76301) (FOR REPAIR)	1		XBOOO
		SEE WP024 00)			
40	MS29513-222	. PACKING	4		PAOZZ
41	W901K24DE	. COUPLING, CLAMP, GROOVED (79326)	2		PAOZZ
		(MCDONNELL SPEC 7M765-24D)			
		(INCLUDES SLEEVE)			
	14J12-24A	. COUPLING, CLAMP, GROOVED (24984)	2		PAOZZ
		(MCDONNELL SPEC 7M765-24D)			
		(INCLUDES SLEEVE)			
	W901F24DE	. COUPLING, CLAMP, GROOVED (79326)	2	*	PAOZZ
		(MCDONNELL SPEC 7M550-24D)			
		(INCLUDES SLEEVE)			
42	74A586331-1003	. TUBE ASSEMBLY, METAL - ENG BOOST	1		PAOZZ
		PUMP, RH, MOTIVE FLOW (NO 3 FUEL			
		TANK WASH FILTER) (76301) (5FAP633)			
43	74A586661-1003	. SUPPORT, FUEL PUMP - MAIN EJECTOR,	1		XBOZZ
		TANK NO. 3 (76301)			
44	2800099-104	. EJECTOR, JET ENGINE FUEL BOOST	1		PAOZZ
		(NO. 3 FUEL TANK ENGINE FUEL			
		BOOST JET EJECTOR) (92203)			
		(MCDONNELL SPEC 74-580112-209)			
		(5BAP591)			
	NAS674V1	. BOLT (AP)	2		PAOZZ
	AN960JD416L	. WASHER (AP)	2		PAOZZ
45	74A586201-2003	. CONNECTOR, TUBE, BULKHEAD PUMP,	1		XBOZZ
		FUEL Y419.000 & Y453.000 (76301)			
46	W702-32D	. NUT ASSEMBLY, TUBE COUPLING (79326)	1	*	PAOZZ
		(MCDONNELL SPEC ST7M191-32D)			
		(INCLUDES NUT AND TWO WASHERS)			
	12H72-32D	. SEE ABOVE (24984)	1	*	PAOZZ
47	MS29513-330	. PACKING	1		PAOZZ
48	74A586662-2005	. SUPPORT, FUEL PUMP - MAIN EJECTOR,	1		XBOZZ
		TANK NO. 3 LH (76301)			
49	74A586332-1005	. TUBE ASSEMBLY, METAL - BOOST PUMP	1		XBOZZ
		MOTIVE FLOW, TANK NO. 3 (76301)			
50	NAS1787A24G	. CLAMP	1		PAOZZ
	NAS674V9	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
51	74A586663-1001	. SUPPORT, FUEL LINE - MOTIVE FLOW,	1		XBOOO
		TANK NO. 3 (76301)			
	MS21062L3	. NUT, PLATE (USE WITH INDEX 51)	2		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION

Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 8)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 3 FUEL TANK ENGINE FUEL BOOST JET EJECTOR (5BAP591)

ENGINE FUEL SUPPLY SYSTEM

EFFECTIVITY: 161716 THRU 161761 BEFORE F/A-18
AFC 18 AND F/A-18 AFC 53

Reference Material

Fuel System	A1-F18AC-460-300
No. 3 Fuel Tank Access Cover	WP006 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer and Engine Fuel Supply System Test	WP012 00
Line Maintenance Procedures	A1-F18AC-LMM-000

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Removal	2

Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required (Cont)

Materials Required		Nomenclature	Specification or Part Number
Nomenclature	Specification or Part Number	Packing (6)	MS29513-226
Packing (2)	MS29513-214	Packing (6)	MS29513-230
Packing (2)	MS29513-222	Packing	MS29513-330
		Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove coupling (3, figure 1, detail A), packings (2), and tube (1).
- c. Remove couplings (3), packings (2), and main vent assembly (4).
- d. Remove probe guide (11, detail B), bolts (12), and attaching parts.
- e. Disconnect tube (10, detail C) and rotate away from work area.
- f. Remove coupling (7), packings (6), and rotate tube (5) away from work area.
- g. Remove tube (24, detail D).
- h. Remove couplings (14), tube (15), and packings (13).
- i. Disconnect tube (19) and clamp (25, detail F).
- j. Remove coupling (20, detail D), clamp (17), and manifold (16) with attaching parts.
- k. Carefully remove panel (27, detail E) and attaching parts with defuel valve attached.
- l. Remove panels (28) and attaching parts.
- m. Remove stiffener (29) and attaching parts.
- n. Remove coupling (31, detail G), nut assembly (33), packings (30 and 34) and attaching parts.
- o. Remove jet ejector (32) and attaching parts.

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum



- b. Lubricate new packings with petrolatum.

WARNING

To prevent fuel system malfunction during inverted flight, shuttle inside ejector must move freely from top to bottom.

- c. Turn ejector (32, figure 1, detail G) upside down, then right side up and make sure shuttle inside ejector moves freely from top to bottom. (QA)
- d. Inspect ejector (32) and make sure top and bottom screens do not have damage which could restrict movement of shuttle inside ejector. (QA)
- e. Install nut assembly (33), packing (34), jet ejector (32), and attaching parts. Handtighten nut (33).
- f. Install coupling (31) and packings (30).
- g. Inspect for and remove any foreign objects from below baffle area. (QA)
- h. Install stiffener (29, detail E) and attaching parts.
- i. Install panel (28) and attaching parts.
- j. Carefully position panel (27) with defuel valve attached and install attaching parts.

- k. Prepare mating surfaces of manifold (16, detail D), attaching parts and baffle for electrical bond (A1-F18AC-LMM-000).

- l. Position manifold (16) and install packings (13), coupling (20), clamp (17), and attaching parts.

- m. Connect tube (19), and clamp (25, detail F) to bracket (26) with attaching parts.

- n. Position tube (15, detail D) and install packings (13) and couplings (14).

- o. Install tube (24).

- p. Connect tube (10, detail C).

- q. Connect tube (5), install packings (6) and coupling (7).

r. Install probe guide (11, detail B), bolts (12), and attaching parts.

s. Install packing (2, detail A), coupling (3), and main vent assembly (4).

t. Install packings (2), coupling (3), and tube (1).

u. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)

v. Install no. 3 fuel tank access cover (WP006 00).

w. Connect both utility and emergency battery connectors (WP013 00).

x. Do internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

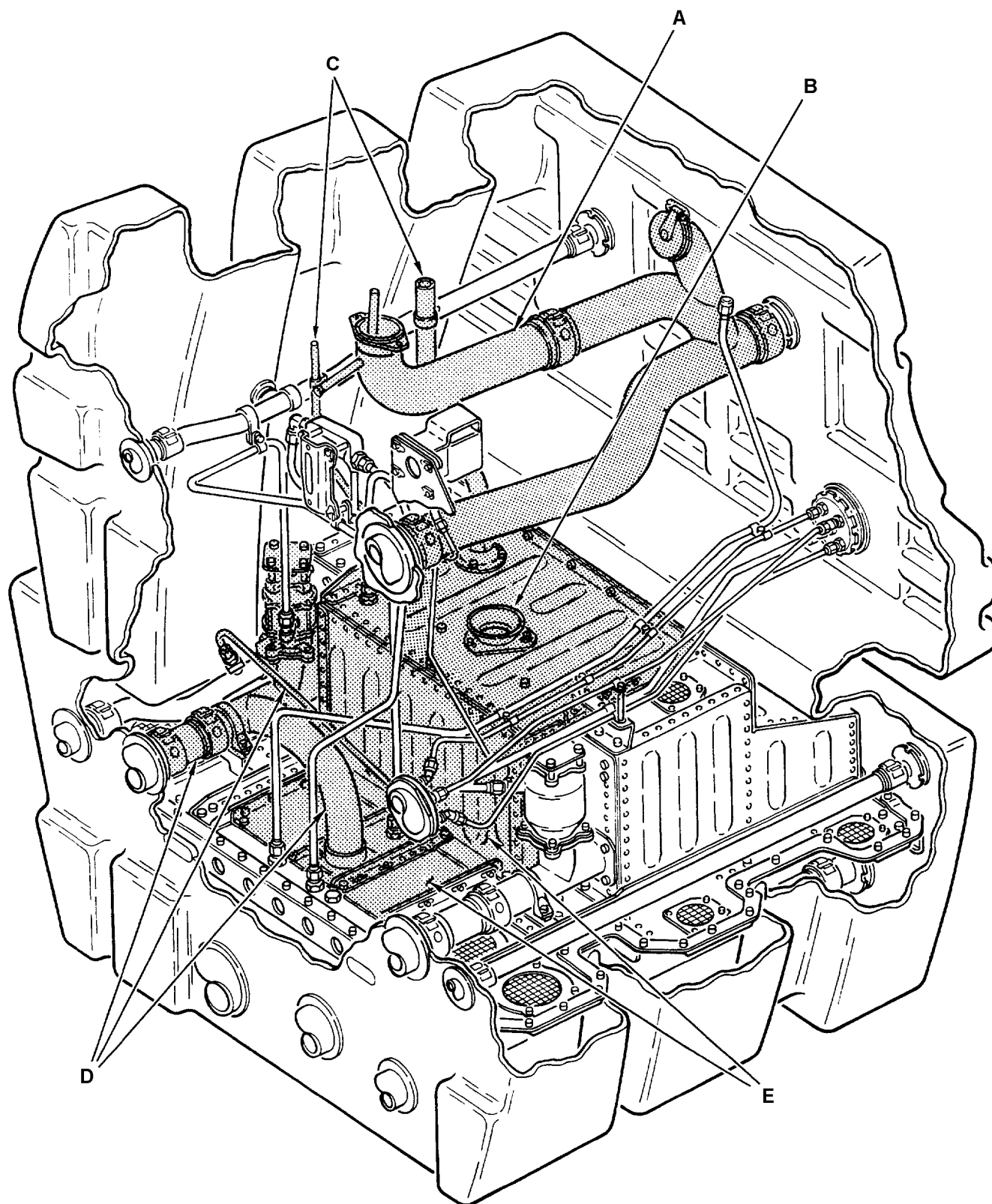


Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 1)

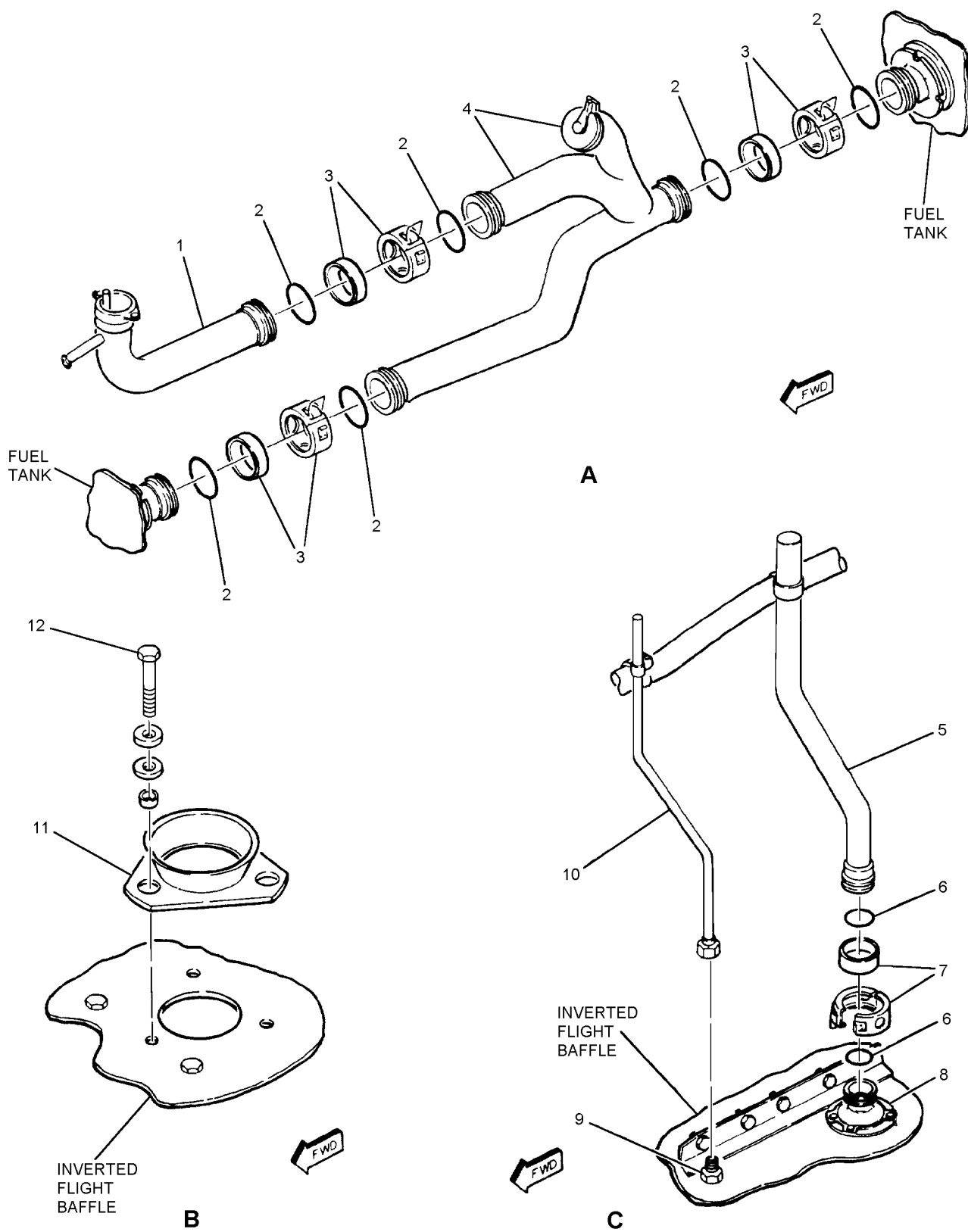


Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 2)

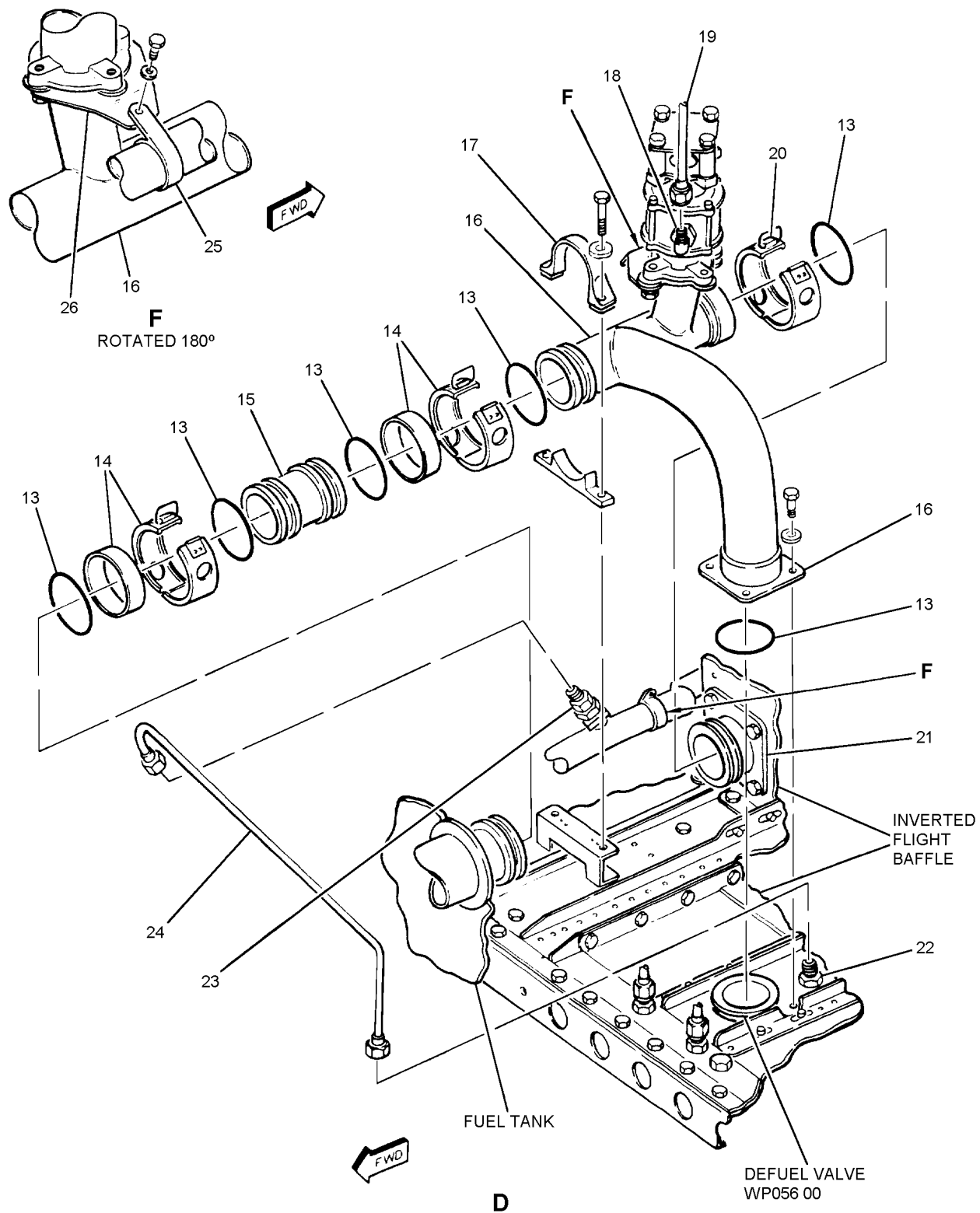


Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 3)

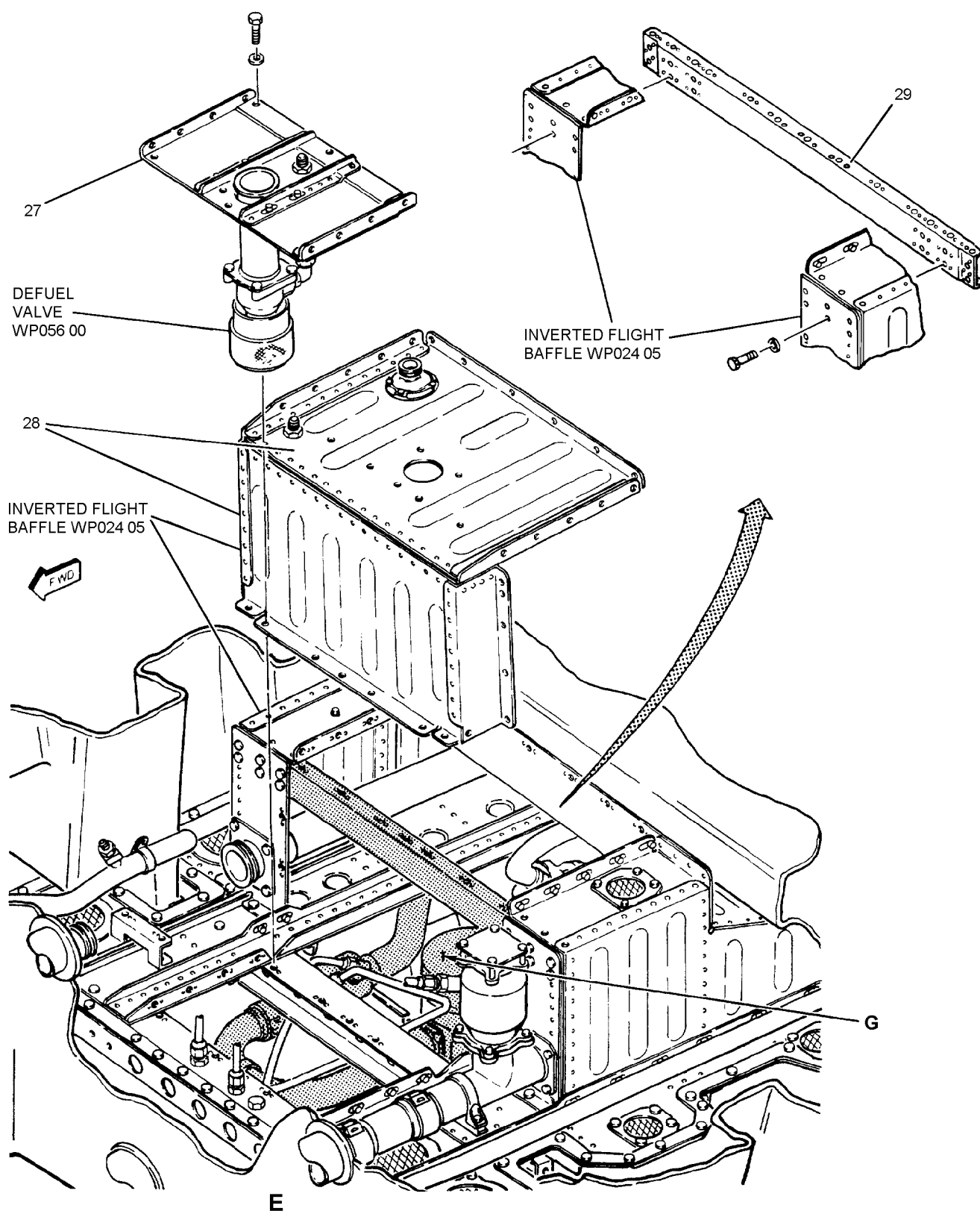
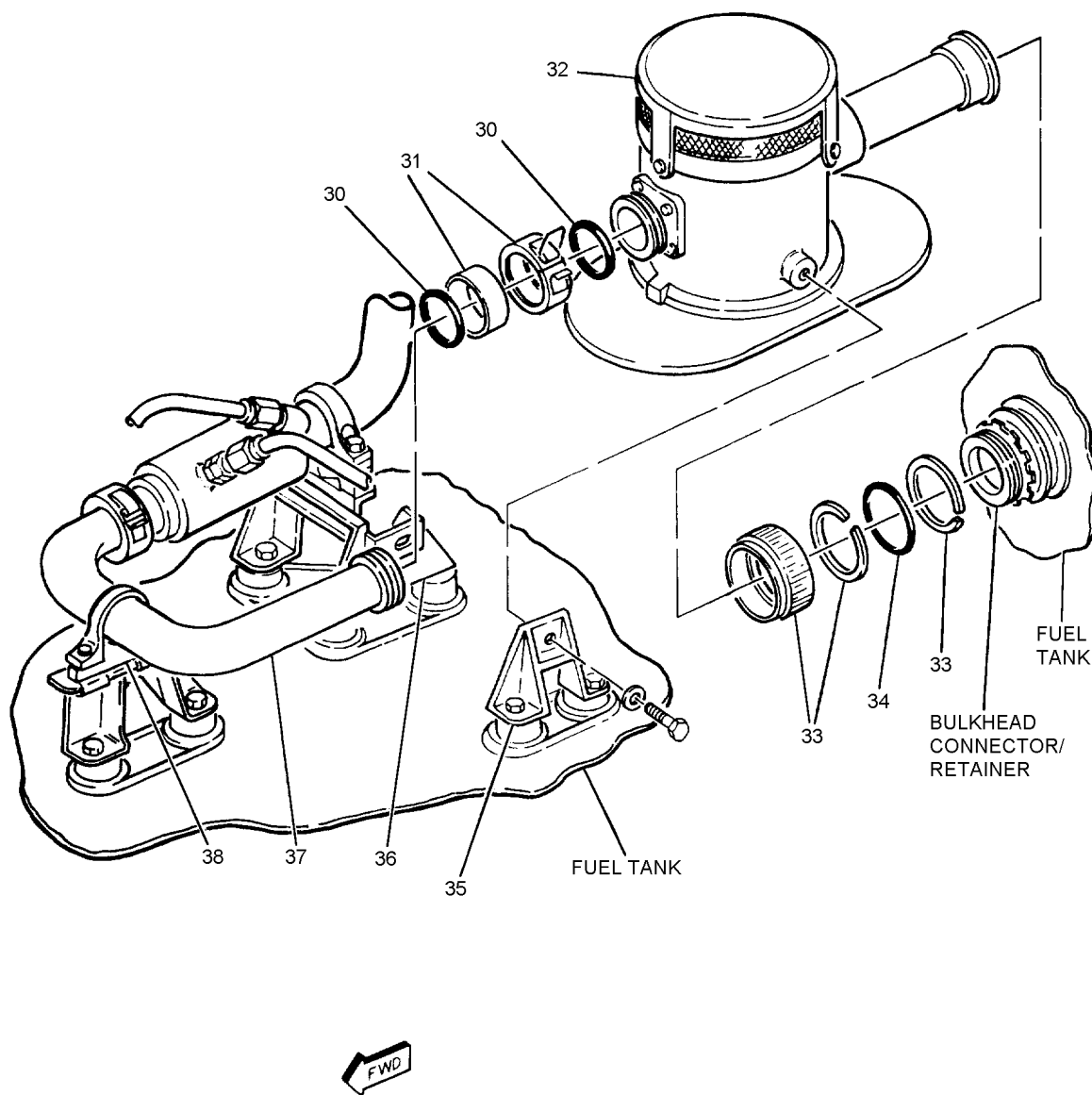


Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 4)



G

Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 5)

1340201E

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 3 FUEL TANK ENGINE FUEL BOOST JET			
		EJECTOR (5BAP591)			
1	74A586381-1001	. TUBE ASSY - CLIMB VENT, FUEL TANK	1		XBOOO
		NO. 3 (76301)			
	NS103597-02	. NUT, SELF-LOCKING, PLATE	2	*	PAOZZ
		(80539) (MCDONNELL SPEC			
		ST3M470C3M) (USE WITH INDEX 1)			
	F10965-1-3	. NUT, SELF-LOCKING, PLATE (72962)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	F29339-01-3	. NUT, SELF-LOCKING, PLATE (15653)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	MS20426AD3 #	. RIVET (AP)	2		-
2	MS29513-230	. PACKING	6		PAOZZ
3	W901K40DE	. COUPLING, CLAMP, GROOVED (79326)	3		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	14J12-40A	. COUPLING, CLAMP, GROOVED (24984)	3		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	W901F40DE	. COUPLING, CLAMP, GROOVED (79326)	3	*	PAOZZ
		(MCDONNELL SPEC 7M550-40D)			
		(INCLUDES SLEEVE)			
4	74A585003-2001	. MAIN VENT ASSEMBLY (NO.3 FUEL	1		PAOZZ
		TANK DIVE VENT CHECK VALVE)			
		(76301) (5VAP582)			
5	74A586314-1005	. TUBE ASSEMBLY, METAL - VENT, AFT,	1		XBOZZ
		INVERTED FLT COMPT, TK 3 (76301)			
6	MS29513-214	. PACKING	2		PAOZZ
7	W901K16DE	. COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE)			
	14J12-16A	. COUPLING, CLAMP, GROOVED (24984)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE)			
	W901F16DE	. COUPLING, CLAMP, GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M550-16D)			
		(INCLUDES SLEEVE)			
8	74A586248-2007	. CONNECTOR, FLANGE (FITTING) (76301)	1		XBOZZ
9	7M637BT-6D	. NIPPLE (76301)	1		PAOZZ
10	74A586313-1005	. TUBE ASSEMBLY, METAL - VENT, FWD,	1		MGOZZ
		INVERTED FLT COMPT TK 3 (76301)			
11	74A586297-2001	. GUIDE PROBE - FUEL QTY, TANK 2 & 3	1		XBOZZ
		(76301)			
12	NAS673V4	. BOLT	3		PAOZZ
	4M36-01016	. WASHER (76301) (USE WITH INDEX 12)	6		PAOZZ
	NAS43DD3-8	. SPACER (USE WITH INDEX 12)	3		PAOZZ
13	MS29513-226	. PACKING	6		PAOZZ
14	W901K32DE	. COUPLING, CLAMP, GROOVED (79326)	2		PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE)			

Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 6)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
	14J12-32A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-32D) (INCLUDES SLEEVE)	2		PAOZZ
	W901F32DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-32D) (INCLUDES SLEEVE)	2	*	PAOZZ
15	74A586216-1005	. TUBE ASSEMBLY, METAL - REFUEL, TANK NO. 2 (76301)	1		XBOZZ
16	74A586317-1005	. MANIFOLD, FUEL, AIRCRAFT - FUEL TANK NO. 3 (76301) (SUPERSEDES 74A586317-1001)	1		XBOZZ
	NAS673V2	. BOLT (AP)	4		PAOZZ
	AN960JD10L	. WASHER (AP)	4		PAOZZ
17	NAS1787A32G	. CLAMP	1		PAOZZ
	NAS673V9	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
18	7M148V6	. ELBOW (76301)	1		XBOZZ
19	74A586341-1015	. TUBE ASSEMBLY, METAL - PILOT VALVE RH PORT TO REFUEL V (76301) (SUPERSEDES 74A586341-1007 AND 74A586341-1011)	1		MGOZZ
20	W904K32DE	. COUPLING, CLAMP, GROOVED (HALF) (79326) (MCDONNELL SPEC 7M765-32D-1)	1		PAOZZ
	14C12-32A	. COUPLING, CLAMP, GROOVED (HALF) (24984) (MCDONNELL SPEC 7M765-32D-1)	1		PAOZZ
	W904F32DE	. COUPLING, CLAMP, GROOVED (HALF) (79326) (MCDONNELL SPEC 7M550-32D-1)	1	*	PAOZZ
21	74A586248-2001	. CONNECTOR, FLANGE (FITTING) (76301)	1		XBOZZ
22	74A586248-2001	. CONNECTOR, FLANGE (FITTING) (76301)	1		XBOZZ
	NAS674V3	. BOLT (AP)	4		PAOZZ
	AN960JD416L	. WASHER (AP)	4		PAOZZ
23	7M637BD-6D	. NIPPLE (76301)	1		PAOZZ
24	74A586669-1017	. TUBE ASSEMBLY, METAL - PRESS SENSOR TO DEFUEL LINE, TK 3 (76301) (SUPERSEDES 74A586669-1013)	1		MGOZZ
25	MS25281-R20	. CLAMP (SUPERSEDES MS25281-20)	1		PAOZZ
	NAS673V3	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
26	74A586323-1035	. BRACKET ASSY (76301)	1		XBOZZ
	MS21060L3	. NUT, PLATE (USE WITH INDEX 26)	1		PAOZZ
	NAS1079AD3 #	. RIVET (AP)	2		-
27	74A586315-2013	. PANEL ASSY, FRONT (76301) (FOR REPAIR SEE WP024 05)	1		XBOOO
	NAS673V4	. BOLT (AP)	AR		PAOZZ
	AN960JD10L	. WASHER (AP)	AR		PAOZZ
28	74A586315-2011	. PANEL ASSY, CENTER (76301) (FOR REPAIR SEE WP024 05)	1		XBOOO
	NAS673V4	. BOLT (AP)	AR		PAOZZ
	AN960JD10L	. WASHER (AP)	AR		PAOZZ
29	74A586323-1007	. STIFFENER ASSY (76301) (FOR REPAIR SEE WP024 05)	1		XBOOO
	NAS673V4	. BOLT (AP)	AR		PAOZZ
	AN960JD10L	. WASHER (AP)	AR		PAOZZ

Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejektor (5BAP591) (Sheet 7)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
30	MS29513-222	.	PACKING	.....					2		PAOZZ
31	W901K24DE	.	COUPLING, CLAMP, GROOVED (79326)	.....					1		PAOZZ
			(MCDONNELL SPEC 7M765-24D)								
			(INCLUDES SLEEVE)								
	14J12-24A	.	COUPLING, CLAMP, GROOVED (24984)	.....					1		PAOZZ
			(MCDONNELL SPEC 7M765-24D)								
			(INCLUDES SLEEVE)								
	W901F24DE	.	COUPLING, CLAMP, GROOVED (79326)	.....					1	*	PAOZZ
			(MCDONNELL SPEC 7M550-24D)								
			(INCLUDES SLEEVE)								
32	2800099-104	.	EJECTOR, JET ENGINE FUEL BOOST	.....					1		PAOZZ
			(NO. 3 FUEL TANK ENGINE FUEL								
			BOOST JET EJECTOR) (92003)								
			(MCDONNELL SPEC 74-580112-209)								
			(5BAP591)								
	NAS674V1	.	BOLT (AP)	.....					2		PAOZZ
	AN960JD416L	.	WASHER (AP)	.....					2		PAOZZ
33	W702-32D	.	NUT ASSEMBLY, TUBE COUPLING (79326)	.....					1	*	PAOZZ
			(MCDONNELL SPEC ST7M191-32D)								
			(INCLUDES NUT AND 2 WASHERS)								
	12H72-32D	.	SEE ABOVE (24984)	.....					1	*	PAOZZ
34	MS29513-330	.	PACKING	.....					1		PAOZZ
35	74A586662-2005	.	SUPPORT, FUEL PUMP - MAIN EJECTOR,	.....					1		XBOZZ
			TANK NO. 3, LH (76301)								
36	74A586661-1003	.	SUPPORT, FUEL PUMP - MAIN EJECTOR,	.....					1		XBOZZ
			TANK NO. 3 (76301)								
37	74A586332-1005	.	TUBE ASSEMBLY, METAL - BOOST PUMP,	.....					1		XBOZZ
			MOTIVE FLOW, TANK NO. 3 (76301)								
38	NAS1787A24G	.	CLAMP	.....					1		PAOZZ
	NAS673V9	.	BOLT (AP)	.....					2		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					2		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

Figure 1. No. 3 Fuel Tank Engine Fuel Boost Jet Ejector (5BAP591) (Sheet 8)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 3 FUEL TANK ENGINE FUEL TURBINE BOOST PUMP (5BAR680)

ENGINE FUEL SUPPLY SYSTEM

EFFECTIVITY: 161924 AND UP; ALSO 161353 THRU 161761
AFTER F/A-18 AFC 18 AND F/A-18 AFC 53

Reference Material

Fuel System	A1-F18AC-460-300
No. 3 Fuel Tank Access Cover	WP006 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer, and Engine Fuel Supply System Test	WP012 00
Line Maintenance Procedures	A1-F18AC-LMM-000
Structural Hardware	NAVAIR 01-1A-8

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Removal	3

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 18	-	Incorporation of Fuel Turbine Boost Pump/ Sealing of Raised Baffle in Fuel Tanks 2 and 3 (ECP MDA-F/A-18-00077C1/C2)	15 Jul 86	-
F/A-18 AFC 53	-	Elimination of Tanks 1 and 4 Sneak Circuit, Tank 4 Motive Flow Shut Off Valve, and Raised Inverted Baffle (ECP MDA-F/ A-18-00055/C1)	15 Jul 86	-

1. TURBINE PUMP.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29512-06
Packing (2)	MS29513-214
Packing (3)	MS29513-222
Packing (6)	MS29513-226
Packing (7)	MS29513-230
Petrolatum, Technical	VV-P-236 (CAGE 81348)

2. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove coupling (3, figure 1, detail A), packings (2), and tube (1).
- c. Remove couplings (3), packings (2), and main vent assembly (4).
- d. Remove probe guide (10, detail B), gasket (9), bolts (11, 12, and 13), and attaching parts.
- e. Remove coupling (7, detail C), packings (6), and rotate tube (5) away from work area.
- f. Remove tube (25, detail D).
- g. Remove couplings (15), packings (14), and tube (16).
- h. Disconnect tube (20) and clamp (26, detail F).
- i. Remove coupling (21, detail D), clamp (18), packings (14), and manifold (17) with attaching parts.
- j. Carefully remove panel (28, detail E) and attaching parts with defuel valve attached.
- k. Remove panels (29) and attaching parts.
- l. Remove stiffener (30) and attaching parts.

- m. Remove coupling (32, detail G) and packings (31).

- n. Remove clamps (42 and 43, detail J), clamp (44 or 52), bolt (49), and attaching parts.

- o. Remove bolts (40, detail G) and attaching parts, tube (41), and packing (39).

- p. Remove bolts (55, detail H), packing (54), lead (56), and attaching parts.

- q. Remove pump (34, detail G), bolts (35 and 36), and attaching parts.

3. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings with petrolatum.
- c. Install packing (54, figure 1, detail H).
- d. Install pump (34, detail G) on tube (37 or 38), lead (56, detail H), bolts (55) and attaching parts, electrical bond lead (56), and tube (37 or 38) (A1-F18AC-LMM-000).
- e. Install tube (41 detail G), coupling (32), packings (31 and 39), bolts (40), and attaching parts.
- f. Install clamp (44 or 52, detail J), bolt (49), clamps (42 and 43), and attaching parts.
- g. Install stiffener (30, detail E).
- h. Inspect for and remove any foreign objects from below baffle area. (QA)
- i. Install panel (29, detail E) and attaching parts.
- j. Carefully position panel (28) with defuel valve attached and install attaching parts.
- k. Prepare mating surfaces of manifold (17, detail D), attaching parts, and baffle for electrical bond (A1-F18AC-LMM-000).

l. Position manifold (17) and install packings (14), coupling (21), clamp (18), and attaching parts.

m. Connect tube (20) and clamp (26, detail F) to bracket (27) with attaching parts.

n. Position tube (16, detail D) and install packings (14) and coupling (15).

o. Install tube (25).

p. Connect tube (5, detail C), install packings (6) and coupling (7).

q. Install probe guide (10, detail B), gasket (9), bolts (11, 12, and 13), and attaching parts.

r. Install packings (2, detail A), couplings (3), and main vent assembly (4).

s. Install packings (2), coupling (3), and tube (1).

t. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)

u. Install no. 3 fuel tank access cover (WP006 00).

v. Connect both utility and emergency battery connectors (WP013 00).

w. Do internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

4. **TURBINE PUMP BRACKET.**

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (as required)	M25988/1-312
Petrolatum, Technical	VV-P-236 (CAGE 81348)

5. **REMOVAL.**

a. Remove bracket (1, figure 2) and attaching parts.

b. Remove bracket (7, detail A) and attaching parts.

6. **INSTALLATION.**

a. Install bracket (1, figure 2) and attaching parts. Seal bracket (1) bolt threads per WP013 00.

b. Install bracket (7, detail A), packings (11), and attaching parts. Seal bolts (9 and 10) threads per WP013 00.

7. **INSPECTION.**

Support Equipment Required

None

Materials Required

None

a. Inspect brackets (1, figure 2 and 7, detail A) per substeps below:

- (1) Cracks.
- (2) Corrosion.
- (3) Sharp edges that could damage tank.
- (4) Stripped plate nuts.
- (5) Loose rivets.

8. **REPAIR.**

Support Equipment Required

None

Materials Required

None

NOTE

Repair of brackets is limited to replacement of plate nuts, spacers and rivets.

9. DISASSEMBLY.

a. If damaged, remove brackets (1, figure 2 and 7, detail A) per paragraph 5.

b. If damaged, remove plate nuts (3, 5, 6, figure 2 and 8, detail A) NAVAIR 01-1A-8.

c. If damaged, remove spacer (4) and rivets per NAVAIR 01-1A-8.

10. ASSEMBLY.

a. Install spacer (2, figure 2) and rivets per NAV-AIR 01-1A-8.

b. Install plate nuts (3, 5, 6, figure 2 and 8, detail A) NAVAIR 01-1A-8.

c. Install brackets (1, figure 2 or 7, detail A) per paragraph 6.

11. ILLUSTRATED PARTS BREAKDOWN.

12. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

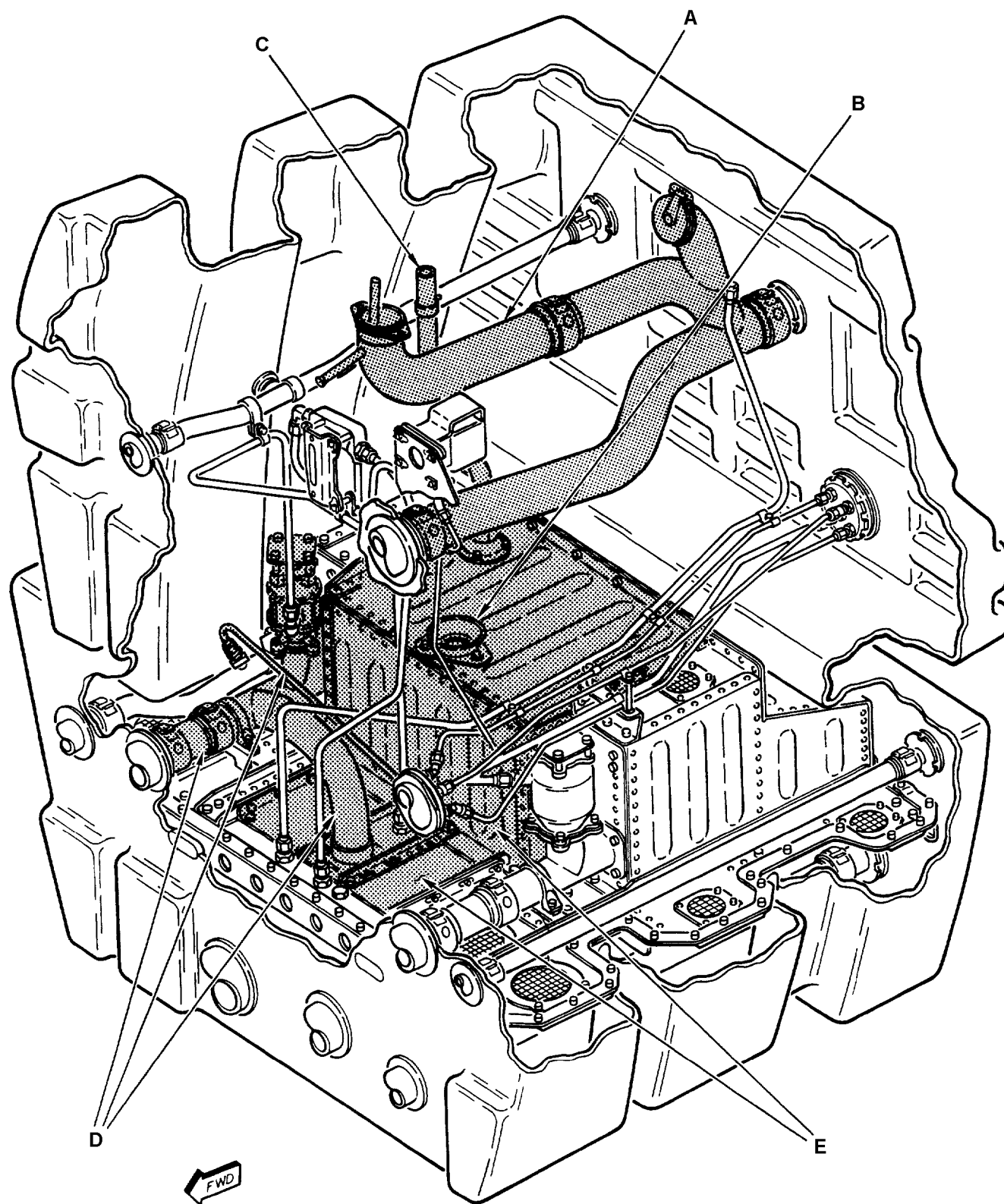


Figure 1. No. 3 Fuel Tank Engine Fuel Turbine Boost Pump (5BAR680) (Sheet 1)

1340301A

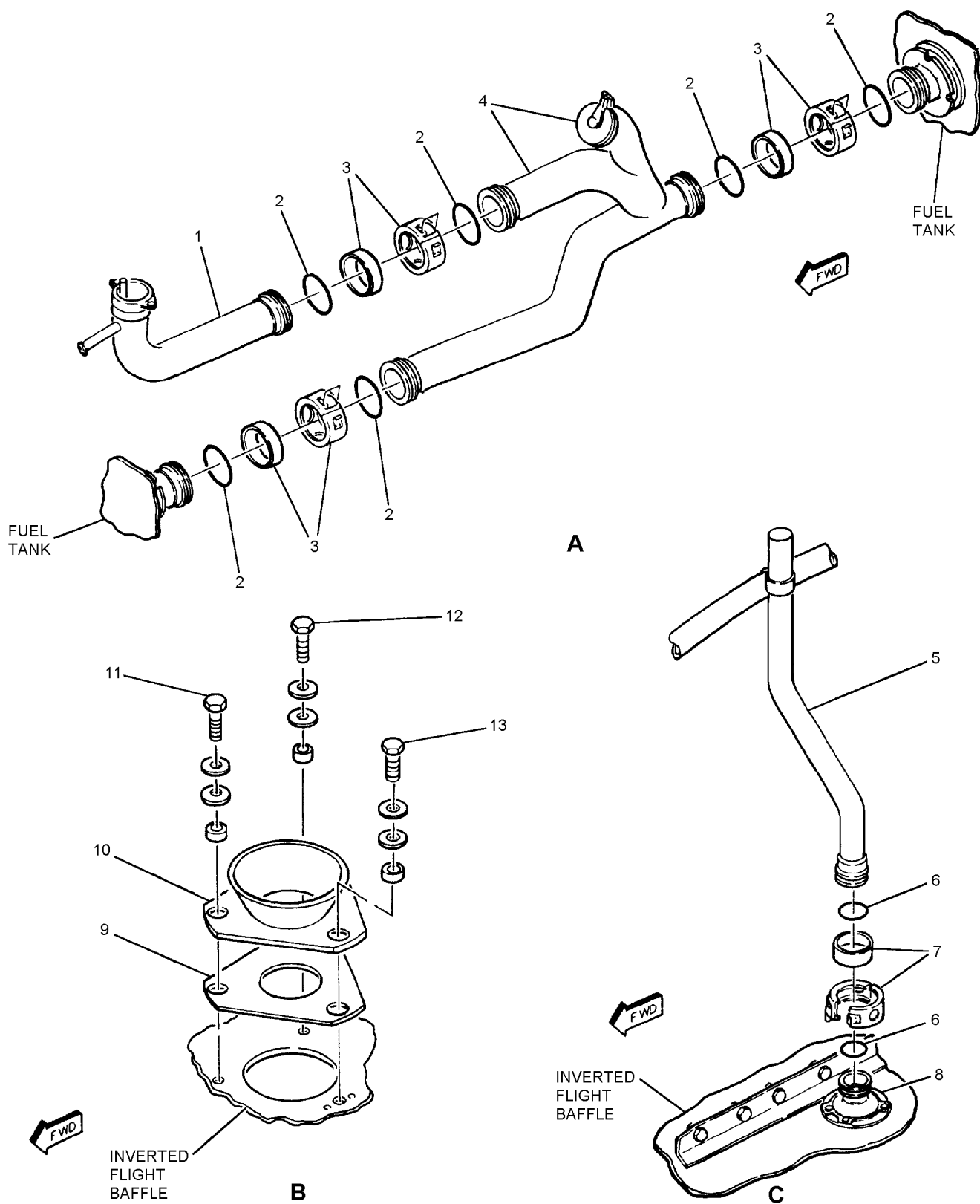
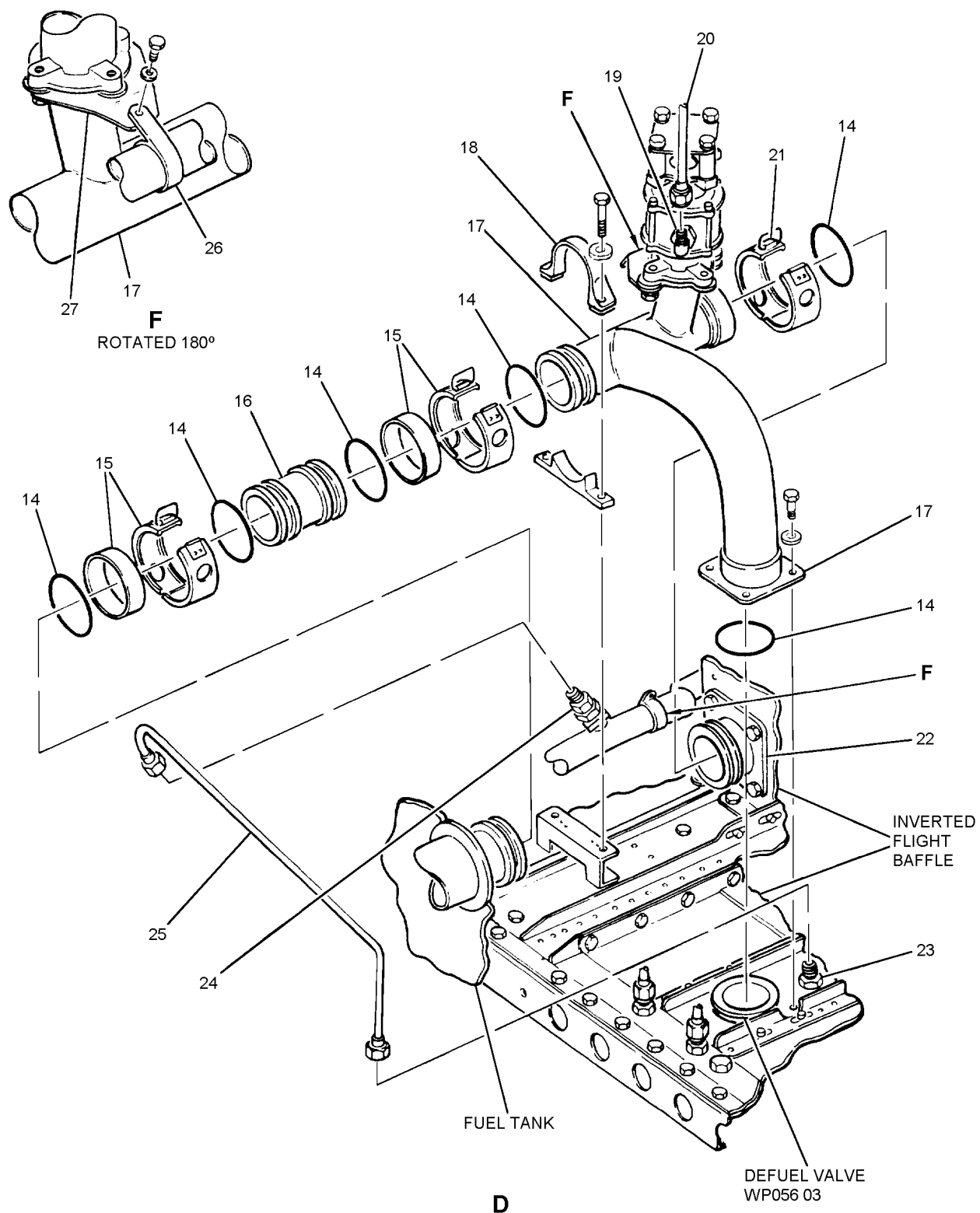


Figure 1. No. 3 Fuel Tank Engine Fuel Turbine Boost Pump (5BAR680) (Sheet 2)



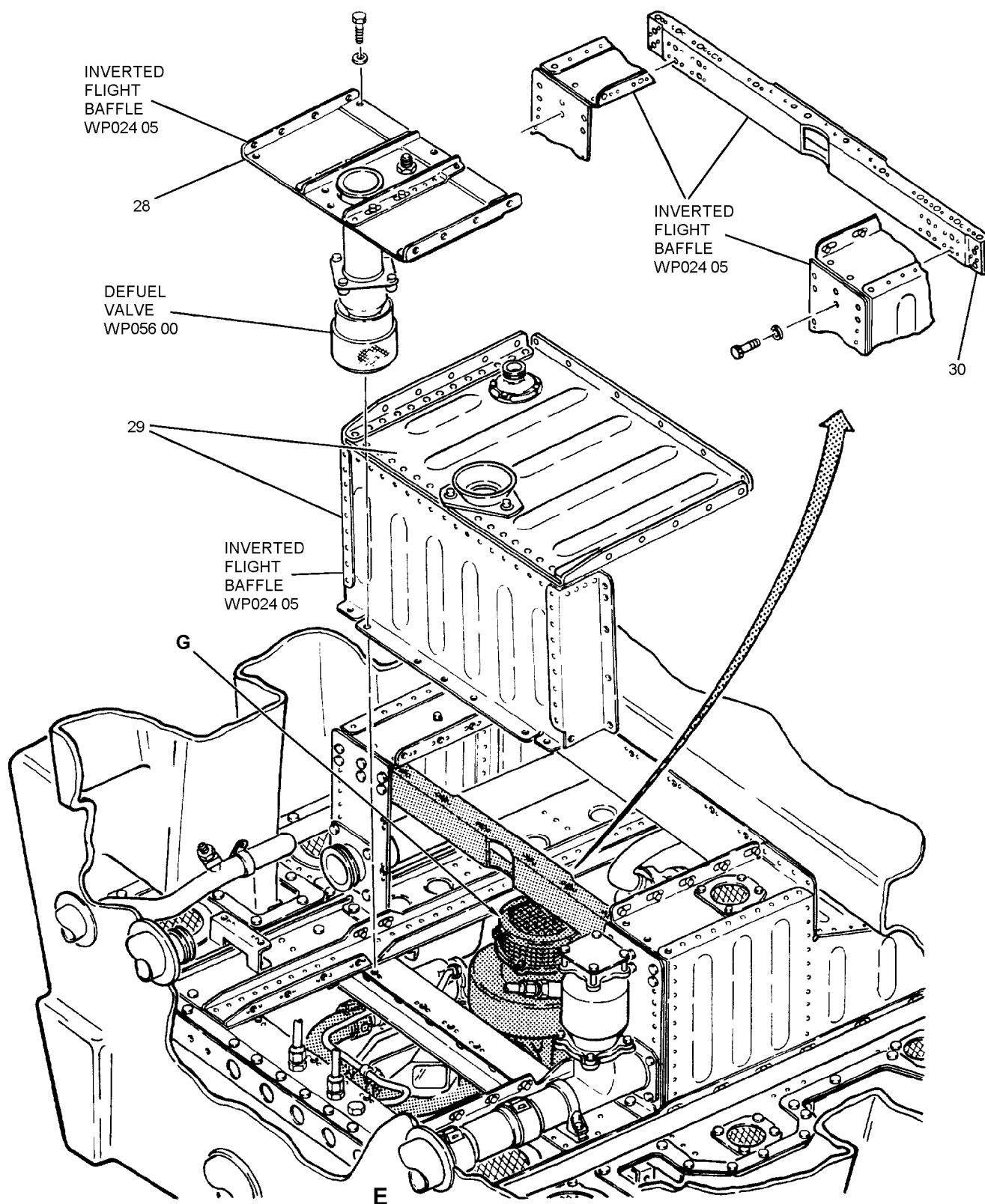


Figure 1. No. 3 Fuel Tank Engine Fuel Turbine Boost Pump (5BAR680) (Sheet 4)

1340301D

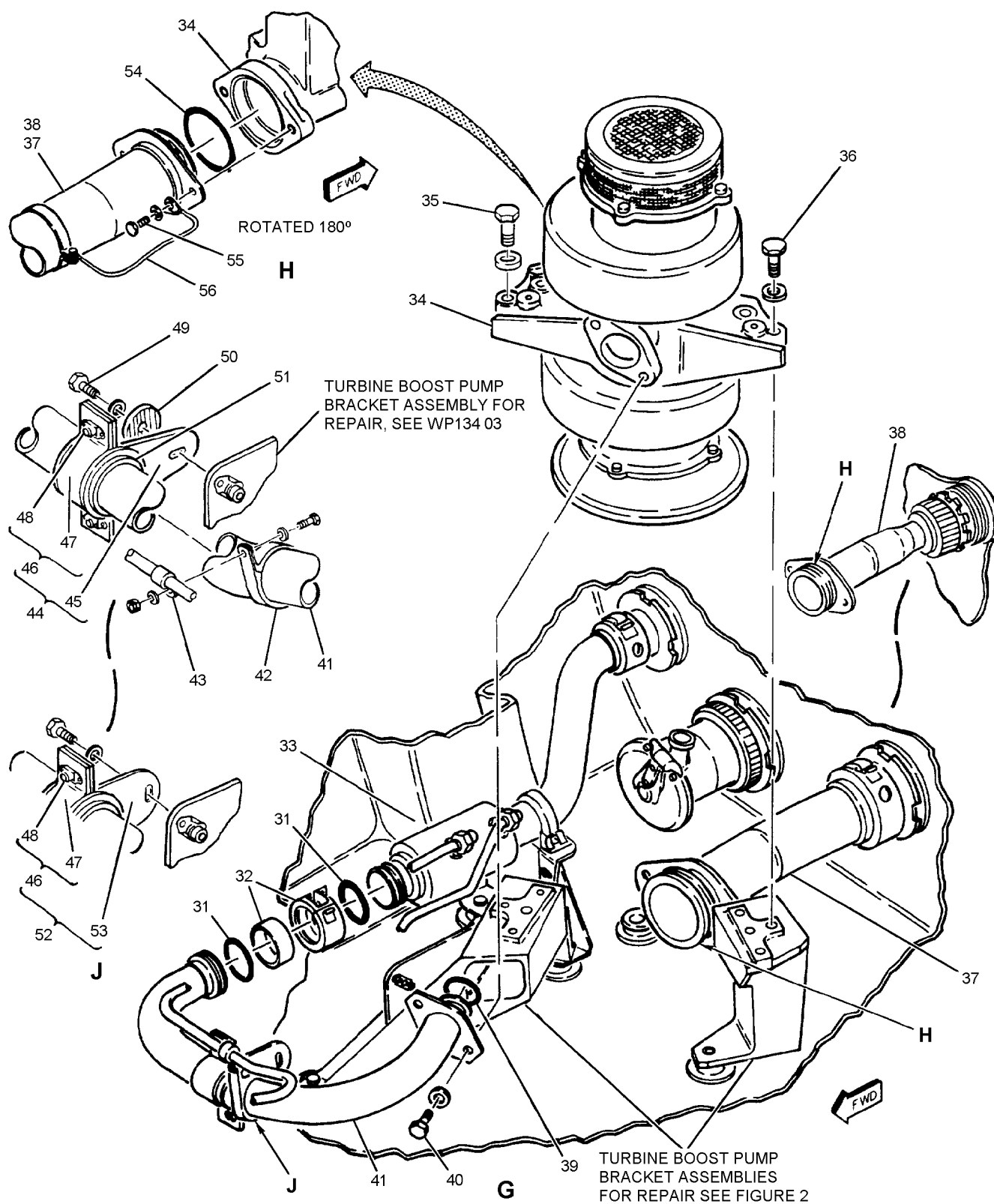


Figure 1. No. 3 Fuel Tank Engine Fuel Turbine Boost Pump (5BAR680) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 3 FUEL TANK ENGINE FUEL TURBINE			
		BOOST PUMP (5BAR680)			
1	74A586381-1001	. TUBE ASSY - CLIMB VENT, FUEL TANK	1		XBOOO
		NO. 3 (76301)			
	NS103597-02	. NUT, SELF-LOCKING, PLATE (80539)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	F10965-1-3	. NUT, SELF-LOCKING, PLATE 172962)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	F29339-01-3	. NUT, SELF-LOCKING, PLATE (15653)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	MS20426AD3 #	. RIVET (AP)	2		-
2	MS29513-230	. PACKING	6		PAOZZ
3	W901K40DE	. COUPLING, CLAMP, GROOVED (79326)	3		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	14J12-40A	. COUPLING, CLAMP, GROOVED (24984)	3		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	W901F40DE	. COUPLING, CLAMP, GROOVED (79326)	3	*	PAOZZ
		(MCDONNELL SPEC 7M550-40D)			
		(INCLUDES SLEEVE)			
4	74A585003-2001	. VENT ASSEMBLY, FUEL TANK NO. 3	1	*	PAOZZ
		(NO. 3 FUEL TANK DIVE VENT CHECK			
		VALVE) (76301) (5VAP582)			
	74A586321-1011	. SEE ABOVE	1	*	PAOZZ
5	74A586314-1005	. TUBE ASSEMBLY, METAL - VENT, AFT,	1		XBOZZ
		INVERTED FLT COMPT, TK 3 (76301)			
6	MS29513-214	. PACKING	2		PAOZZ
7	W901K16DE	. COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE)			
	14J12-16A	. COUPLING, CLAMP, GROOVED (24984)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE)			
	W901F16DE	. COUPLING, CLAMP, GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M550-16D)			
		(INCLUDES SLEEVE)			
8	74A586248-2007	. CONNECTOR, FLANGE (FITTING) (76301)	1		XBOZZ
9	74A586556-2001	. GASKET, PROBE GUIDE - RAISED	1		MDOZZ
		INVERTED BAFFLE TK. 2 & TK. 3 (76301)			
10	74A586297-2001	. GUIDE, PROBE - FUEL QTY, TANK 2 & 3	1		XBOZZ
		(76301)			
11	NAS673V6	. BOLT	1		PAOZZ
	4M36-01016	. WASHER (76301) (USE WITH INDEX 11)	2		PAOZZ
	NAS43DD3-8	. SPACER (USE WITH INDEX 11)	1		PAOZZ
12	NAS673V7	. BOLT	1		PAOZZ
	4M36-01016	. WASHER (76301) (USE WITH INDEX 12)	2		PAOZZ
	NAS43DD3-8	. SPACER (USE WITH INDEX 12)	1		PAOZZ
13	NAS673V5	. BOLT	1		PAOZZ

Figure 1. No. 3 Fuel Tank Engine Fuel Turbine Boost Pump (5BAR680) (Sheet 6)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
	4M36-01016	.	WASHER (76301) (USE WITH INDEX 13)	.....					2		PAOZZ
	NAS43DD3-8	.	SPACER (USE WITH INDEX 13)	.....					1		PAOZZ
14	MS29513-226	.	PACKING	.....					6		PAOZZ
15	W901K32DE	.	COUPLING, CLAMP, GROOVED (79326)	.....					2		PAOZZ
			(MCDONNELL SPEC 7M765-32D)								
			(INCLUDES SLEEVE)								
	14J12-32A	.	COUPLING, CLAMP, GROOVED (24984)	.....					2		PAOZZ
			(MCDONNELL SPEC 7M765-32D)								
			(INCLUDES SLEEVE)								
	W901F32DE	.	COUPLING, CLAMP, GROOVED (79326)	.....					2	*	PAOZZ
			(MCDONNELL SPEC 7M550-32D)								
			(INCLUDES SLEEVE)								
16	74A586216-1005	.	TUBE ASSEMBLY, METAL - REFUEL, TANK	.....					1		XBOZZ
			NO. 2 (76301)								
17	74A586317-1005	.	MANIFOLD, FUEL, AIRCRAFT - FUEL TANK	.....					1		XBOZZ
			NO. 3 (76301) (SUPERSEDES								
			74A586317-1001)								
	NAS673V2	.	BOLT (AP)	.....					4		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					4		PAOZZ
18	NAS1787A32G	.	CLAMP	.....					1		PAOZZ
	NAS673V9	.	BOLT (AP)	.....					2		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					2		PAOZZ
19	7M148V6	.	ELBOW (76301)	.....					1		XBOZZ
20	74A586341-1015	.	TUBE ASSEMBLY, METAL - PILOT VALVE	.....					1		MGOZZ
			RH PORT TO REFUEL V (76301)								
			(SUPERSEDES 74A586341-1007 AND								
			74A586341-1011)								
21	W904K32DE	.	COUPLING, CLAMP, GROOVED (HALF)	.....					1		PAOZZ
			(79326) (MCDONNELL SPEC 7M765-32D-1)								
	14C12-32A	.	COUPLING, CLAMP, GROOVED (HALF)	.....					1		PAOZZ
			(24984) (MCDONNELL SPEC 7M765-32D-1)								
	W904F32DE	.	COUPLING, CLAMP, GROOVED (HALF)	.....					1	*	PAOZZ
			(79326) (MCDONNELL SPEC 7M550-32D-1)								
22	74A586248-2001	.	CONNECTOR, FLANGE (FITTING) (76301)	.....					1		XBOZZ
23	7M637BY-6D	.	ELBOW (76301)	.....					1		PAOZZ
	AN960JD916L	.	WASHER (AP)	.....					1		PAOZZ
	AN924-6D	.	NUT (AP)	.....					1		PAOZZ
24	7M637BD-6D	.	NIPPLE (76301)	.....					1		PAOZZ
	MS29512-06	.	PACKING (USE WITH INDEX 24)	.....					1		PAOZZ
25	74A586669-1017	.	TUBE ASSEMBLY, METAL - PRESS SENSOR	.....					1		MGOZZ
			TO DEFUEL LINE, TK 3 (76301)								
			(SUPERSEDES 74A586669-1007)								
26	MS25281-R20	.	CLAMP (SUPERSEDES MS25281-20)	.....					1		PAOZZ
	NAS673V3	.	BOLT (AP)	.....					1		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					1		PAOZZ
27	74A586323-1035	.	BRACKET ASSY (76301)	.....					1		XBOZZ
	MS21060L3	.	NUT, PLATE (USE WITH INDEX 27)	.....					1		PAOZZ
	NAS1079AD3 #	.	RIVET (AP)	.....					2		-
28	74A586315-2013	.	PANEL ASSY, FRONT (76301) (FOR REPAIR	.....					1		XBOOO
			SEE WP024 05)								
	NAS673V4	.	BOLT (AP)	.....					AR		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					AR		PAOZZ

Figure 1. No. 3 Fuel Tank Engine Fuel Turbine Boost Pump (5BAR680) (Sheet 7)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
29	74A586315-2015	.	PANEL ASSY, CENTER (76301) (FOR REPAIR	.....					1		XBOOO
		.	SEE WP024 05)								
	NAS673V4	.	BOLT (AP)	.....					AR		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					AR		PAOZZ
30	74A586323-1029	.	STIFFENER ASSY (76301) (FOR REPAIR	.....					1	C	XBOOO
		.	SEE WP024 05)								
	74A586323-2017	.	SEE ABOVE	.....					1	E	XBOOO
	NAS673V4	.	BOLT (AP)	.....					AR		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					AR		PAOZZ
31	M529513-222	.	PACKING	.....					2		PAOZZ
32	W901K24DE	.	COUPLING, CLAMP, GROOVED (79326)	.....					1		PAOZZ
		.	(MCDONNELL SPEC 7M765-24D)								
		.	(INCLUDES SLEEVE)								
	14J12-24A	.	COUPLING, CLAMP, GROOVED (24984)	.....					1		PAOZZ
		.	(MCDONNELL SPEC 7M765-24D)								
		.	(INCLUDES SLEEVE)								
	W901F24DE	.	COUPLING, CLAMP, GROOVED (79326)	.....					1	*	PAOZZ
		.	(MCDONNELL SPEC 7M550-24D)								
		.	(INCLUDES SLEEVE)								
33	74A586331-1003	.	TUBE ASSEMBLY - ENGINE BOOST PUMP,	.....					1		PAOZZ
		.	RH, MOTIVE FLOW (NO. 3 FUEL TANK								
		.	WASH FILTER) (76301)								
34	5007006C	.	PUMP, TURBINE DRIVEN (NO. 3 FUEL TANK	....					1		PAODD
		.	ENGINE FUEL TURBINE BOOST PUMP)								
		.	(99167) (MCDONNELL SPEC 74-580168-101)								
		.	(5BAR680) (REPLACES 5007006B)								
	5007006B	.	SEE ABOVE (REPLACED BY (15007006C)	.....					1	*	PAODD
		.	(USE UNTIL EXHAUSTED)								
35	NAS674V16	.	BOLT (AP)	.....					3		PAOZZ
	AN960JD416L	.	WASHER (AP)	.....					3		PAOZZ
36	NAS674V15	.	BOLT (AP)	.....					3		PAOZZ
	AN960JD416L	.	WASHER (AP)	.....					3		PAOZZ
37	74A587119-1001	.	TUBE ASSEMBLY, METAL - TURBO FUEL	.....					1	C	XBOZZ
		.	PUMP TO BKHD, TANK 3 (76301)								
38	74A587119-1003	.	TUBE ASSEMBLY, METAL - TURBO FUEL	.....					1	D	XBOZZ
		.	PUMP TO BKHD, TANK 3 (76301)								
39	MS29513-222	.	PACKING	.....					1		PAOZZ
40	NAS674V4	.	BOLT	.....					2		PAOZZ
	4M36-02069	.	WASHER (76301) (USE WITH INDEX 40)	.....					2		PAOZZ
41	74A587108-1005	.	TUBE ASSEMBLY, METAL - TURBO BOOST	.....					1		XBOZZ
		.	PUMP, TK 3 (76301) (SUPERSEDES								
		.	74A587108-1001 & 74A587108-1003)								
42	MS25281-R24	.	CLAMP (SUPERSEDES MS25281-24)	.....					1		PAOZZ
43	MS25281-R6	.	CLAMP (SUPERSEDES MS25281-6)	.....					1		PAOZZ
	NAS673V3	.	BOLT (AP)	.....					1		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					2		PAOZZ
	NAS1291C3M	.	NUT (AP)	.....					1		PAOZZ
44	74A586750-1003	.	CLAMP - FUEL LINE, MOTIVE FLOW	.....					1	B	XBOOO
		.	TO TURBO PUMP (76301)								
45	74A586750-2007	.	STRAP, RETAINING (76301)	.....					1	B	PAOZZ
	NAS673V4	.	BOLT (AP)	.....					2		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					2		PAOZZ
46	74A586750-2001	.	CLAMP ASSY (76301)	.....					1		AOOOO

Figure 1. No. 3 Fuel Tank Engine Fuel Turbine Boost Pump (5BAR680) (Sheet 8)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
47	74A586750-2005	.	STRAP, RETAINING (76301)	.....					1		PAOZZ
48	MS21060L3	.	NUT, PLATE	.....					2		PAOZZ
	MS20426AD3 #	.	RIVET (AP)	.....					2		-
49	NAS674V5	.	BOLT	.....					1		PAOZZ
	AN960JD416L	.	WASHER (USE WITH INDEX 49)	.....					1		PAOZZ
50	74A586750-2009	.	WASHER (76301)	.....					1	B	PAOZZ
51	74A586750-2011	.	CUSHION (76301)	.....					2	B	PAOZZ
52	74A586750-1001	.	CLAMP - FUEL LINE, MOTIVE FLOW	.....					1	A	XBOOO
			TO TURBO PUMP (76301)								
53	74A586750-2003	.	CLAMP (HALF) (76301)	.....					1	A	PAOZZ
54	MS29513-230	.	PACKING	.....					1		PAOZZ
55	NAS674V4	.	BOLT	.....					2		PAOZZ
	4M36-02069	.	WASHER (76301) (USE WITH INDEX 55)	.....					2		PAOZZ
56	MS25083-7BC6	.	LEAD, ELECTRICAL	.....					1		PAOZZ
	NAS673V5	.	BOLT (AP)	.....					1		PAOZZ
	AN960JD10L	.	WASHER (AP) (ABOVE AND BELOW	.....					2		PAOZZ
			ELECTRICAL LEAD)								
	NAS1291C3M	.	NUT (AP)	.....					1		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

CODE	USABLE ON	MODEL
A	161924 THRU 162421	F/A-18A/B
B	162422 & UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 18	F/A-18A/B
C	161924 & UP	F/A-18A/B
D	161353 THRU 161761 AFTER F/A-18 AFC 53	F/A-18A/B
E	161353 THRU 161761 AFTER F/A-18 AFC 18	F/A-18A/B

Figure 1. No. 3 Fuel Tank Engine Fuel Turbine Boost Pump (5BAR680) (Sheet 9)

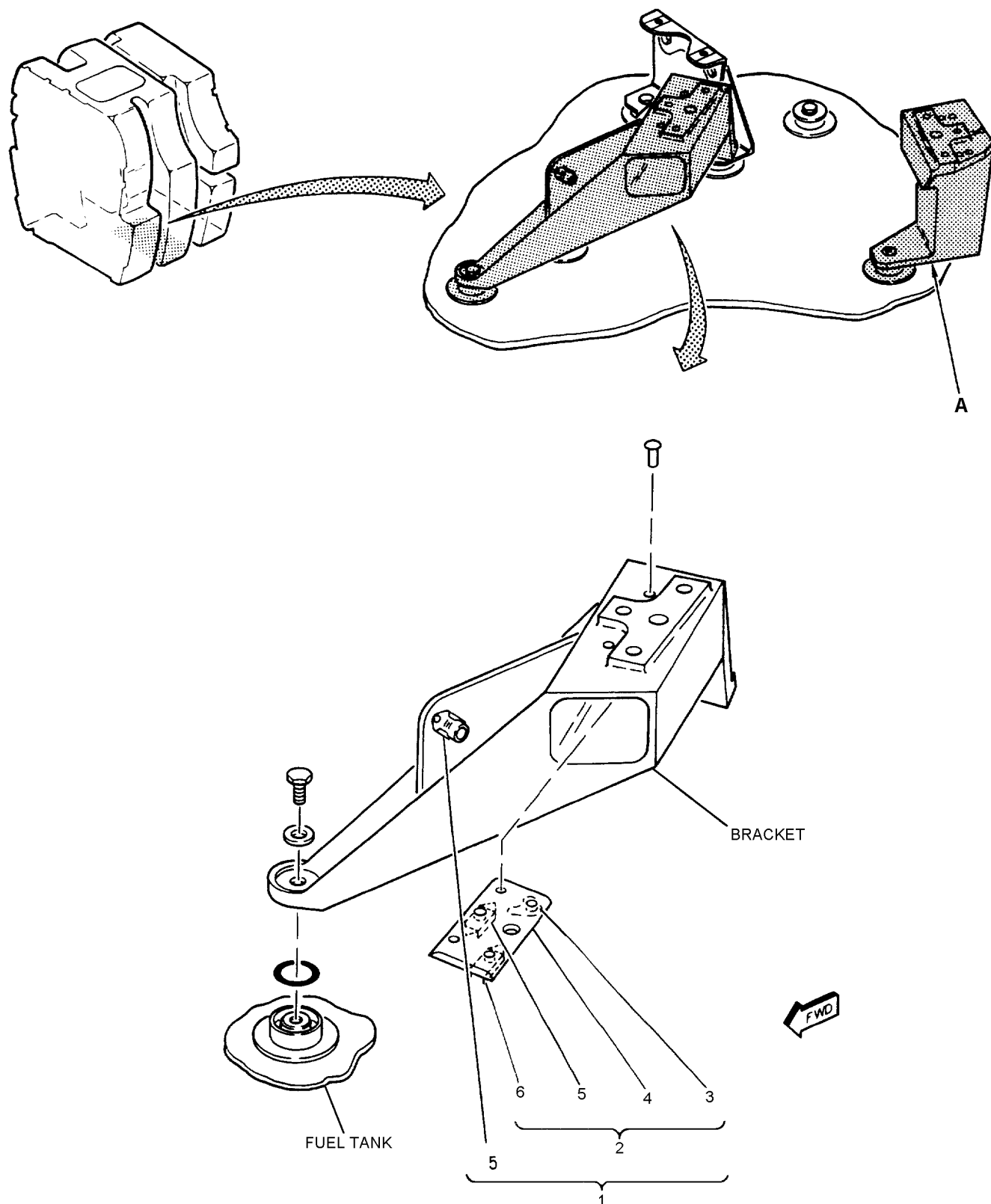


Figure 2. No. 3 Fuel Tank Engine Fuel Turbine Boost Pump Brackets Assemblies (Sheet 1)

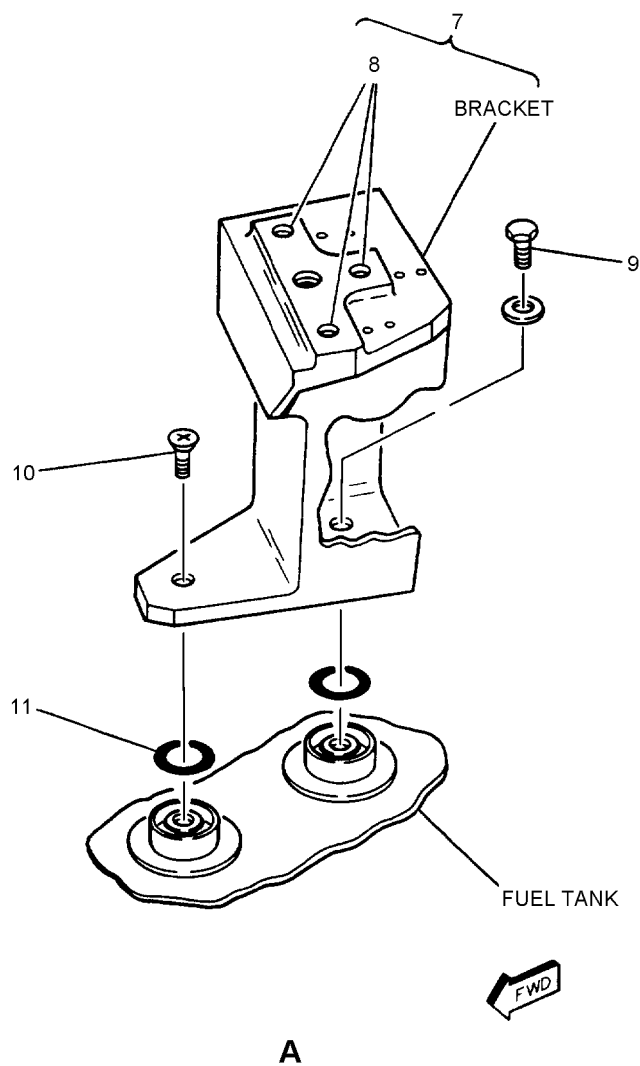


Figure 2. No. 3 Fuel Tank Engine Fuel Turbine Boost Pump
Brackets Assemblies (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		NO. 3 FUEL TANK ENGINE FUEL TURBINE									
		BOOST PUMP BRACKET ASSEMBLIES									
1	74A587106-1001	.	BRACKET ASSY - RH, TURBO BOOST						1		XBOOO
			PUMP, FUEL TANK NO. 3 (ENGINE								
			FUEL TURBINE BOOST PUMP BRACKET								
			ASSEMBLY) (76301)								
	NAS674V4	.	BOLT (AP)						2		PAOZZ
	AN960JD416L	.	WASHER (AP)						2		PAOZZ
	M25988/1-312	.	PACKING (USE WITH INDEX 1)						2		PAOZZ
2	74A587123-1003	.	SPACER ASSEMBLY, PLATE NUT -						1		XBOOO
			MOUNTING BRACKET (76301)								
			SUPERSEDES 74A587123-1001)								
	MS20470AD5 #	.	RIVET (AP)						2		-
3	F50403-4-1	.	NUT, SELF-LOCKING, PLATE (15653)						1	*	PAOZZ
			(MCDONNELL SPEC ST3M721C4M1)								
	F12092-1-4	.	SEE ABOVE (72962)						1	*	PAOZZ
	NS202183-4-1	.	SEE ABOVE (80539)						1	*	PAOZZ
	MS20426AD3 #	.	RIVET (AP)						2		-
4	74A587123-2003	.	SPACER (76301)						1		XBOZZ
5	MS21060L4	.	NUT, PLATE						2		PAOZZ
	MS20426AD3 #	.	RIVET (AP)						2		-
6	MS21062L4	.	NUT, PLATE						1		PAOZZ
	MS20426AD3 #	.	RIVET (AP)						2		-
7	74A587107-1003	.	BRACKET ASSY - LH, TURBO BOOST						1		XBOOO
			PUMP, FUEL TANK NO. 3 (ENGINE								
			FUEL TURBINE BOOST PUMP BRACKET								
			ASSEMBLY) (76301) (SUPERSEDES								
			74A587107-1001)								
8	MS21062L4	.	NUT, PLATE						3		PAOZZ
	MS20470AD3 #	.	RIVET (AP)						2		-
9	NAS674V3	.	BOLT						1		PAOZZ
	AN960JD416L	.	WASHER (USE WITH INDEX 9)						1		PAOZZ
10	NAS664V4HT	.	SCREW						1		PAOZZ
11	M25988-1-312	.	PACKING						2		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

**Figure 2. No. 3 Fuel Tank Engine Fuel Turbine Boost Pump
Brackets Assemblies (Sheet 3)**

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
ENGINE FUEL SHUTOFF VALVE (5B-P072 OR 5B-R070)
ENGINE FUEL SUPPLY SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Aft Access Cover and Tank Entry Procedures	WP008 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captain Manual	A1-F18AC-PCM-000

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 83	-
F/A-18 IAFC 100	-	Right Hand AMAD Bay Motive FLOW Tube Interference, Modification of (ECP 1 MDA-F/A-18-00267)	1 Apr 88	-

1. SHUTOFF VALVE - MOTOR ASSEMBLY.**Support Equipment Required**

None

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC32 (CAGE 96906)
Packing	M25988/1-214
Petrolatum, Technical	VV-P-236 (CAGE 81348)

2. REMOVAL.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).

b. In cockpit on LH and RH advisory and threat warning indicator panel, make sure L and R FIRE warning lights are released (figure 2).

c. Working through MLG wheelwell, disconnect connector (10, figure 1, detail B).

NOTE

Aircraft defueling may be necessary if excessive fuel leaks occur after motor (11) removal.

d. Remove bolts (9), washers, motor (11), and packing (8).

3. INSTALLATION.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).



Petrolatum

1

b. Lubricate new packing (8, figure 1, detail B) with petrolatum.

c. Prepare bolts (9) and washers for electrical bond (A1-F18AC-LMM-000).



Engine shutoff valve failure may result if motor (11) is not properly mated with butterfly valve (4) and flush against fuel cavity floor. Motor (11) will only engage butterfly valve (4) one way. (Details A and B)

d. Trial install motor (11) with manual override arm in the CLOSED (-) position and without packing (8). If required, adjust motor (11) using manual override arm or motor (11) itself until motor (11) is correctly positioned and flush against fuel cavity floor.

e. With manual override arm in the CLOSED (-) position, carefully remove motor (11) to install packing (8). Re-install motor (11), engaging butterfly valve (4, detail A), and install bolts (9, detail B) and washers.

f. Connect connector (10).

g. Do engine fuel shutoff valve leak test per paragraph 7.

4. SHUTOFF VALVE - BUTTERFLY VALVE.**Support Equipment Required**

None

Materials Required

Nomenclature	Specification or Part Number
Packing (4)	MS29513-230
Petrolatum, Technical	VV-P-236 (CAGE 81348)

5. REMOVAL.

a. In cockpit, on LH and RH advisory and threat warning indicator panel, make sure L and R FIRE warning lights are released (figure 2).

b. Do general preparation for removal (WP013 00).

c. Do No. 4 fuel tank aft access cover and tank entry procedure removal (WP008 00).

d. Remove couplings (3, figure 1, detail A) and packings (2).

e. Remove bolts (7), washers, and valve (4).

6. INSTALLATION.

a. Do general preparation for component installation (WP013 00).



Petrolatum

1

b. Lubricate all new packings with petrolatum before installation.

c. Prepare bolts (7, figure 1, detail A) and washers for electrical bond (A1-F18AC-LMM-000).

CAUTION

Engine shutoff valve failure may result if butterfly valve is not properly mated with motor and flush on mount. Butterfly valve will only engage motor one way.

d. With motor (11, detail B) manual override arm in the CLOSED (-) position and butterfly valve (4, detail A) closed (missing spline teeth [detail C] pointing in direction of aft arrow), position butterfly valve (4) flush against mount (6), mating with motor (11, detail B).

e. After butterfly valve (4, detail A) is fully seated flush on mount (6), install bolts (7) and washers. Make sure arrow on valve (4) is pointing aft.

f. Install packings (2) and couplings (3).

g. Do No. 4 fuel tank aft access cover and tank entry procedure installation (WP008 00).

h. Do engine fuel shutoff valve leak test per paragraph 7.

7. ENGINE FUEL SHUTOFF VALVE LEAK TEST. (QA)

a. Refuel aircraft (A1-F18AC-PCM-000).

b. On ELEC power control panel, set BATT switch to ON (figure 2).

c. On LH or RH advisory and threat warning indicator panel, push L or R engine FIRE warning light.

d. In L or R MLG wheelwell, visually inspect to make sure engine fuel shutoff valve manual override arm is in the CLOSED (-) position (figure 2, sheet 2).

e. On LH or RH advisory and threat warning indicator panel, release L or R engine FIRE warning lights (figure 2).

f. In L or R MLG wheelwell, visually inspect to make sure engine fuel shutoff valve manual override arm is in the OPEN (+) position (figure 2, sheet 2).

g. On LH and RH advisory and threat warning indicator panel, push L and R engine FIRE warning light (figure 2).

h. In L and R MLG wheelwell, visually inspect to make sure both engine fuel shutoff valve manual override arms are in the CLOSED (-) position (figure 2, sheet 2).

i. Remove doors 53L and 53R (A1-F18AC-LMM-010).

j. Position an approved safety container below each cap (4, figure 2, sheet 3) to catch residual fuel when cap is removed.

WARNING

To prevent personal injury, do not stand directly under caps when draining residual fuel.

k. Remove both caps (4) and drain residual fuel (approximately 2 gallons from each side).

l. Record leakage rate for one minute.

m. The maximum allowable leakage rate is 300cc.



To prevent damage of tubes near cap, make sure cap points down.

n. Rotate tube (1) so that cap (4) points down on left and right sides.

o. Install both caps (4), then safety cap with lock-wire if safetying holes exist. (QA)

p. Install doors 53L and 53R (A1-F18AC-LMM-010).

q. On LH and RH advisory and threat warning indicator panel, release L and R fuel FIRE warning light (figure 2).

r. In L and R MLG wheelwell, visually inspect to make sure both engine fuel shutoff valve manual override arms are in the OPEN (+) position (figure 2, sheet 2).



To prevent damage to battery bus contactors and/or batteries, be sure BATT switch is set to OFF and BATT SW caution light is OFF (figure 2).

s. On ELEC power control panel, set BATT switch to OFF, BATT SW caution light goes out.

8. ILLUSTRATED PARTS BREAKDOWN.

9. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

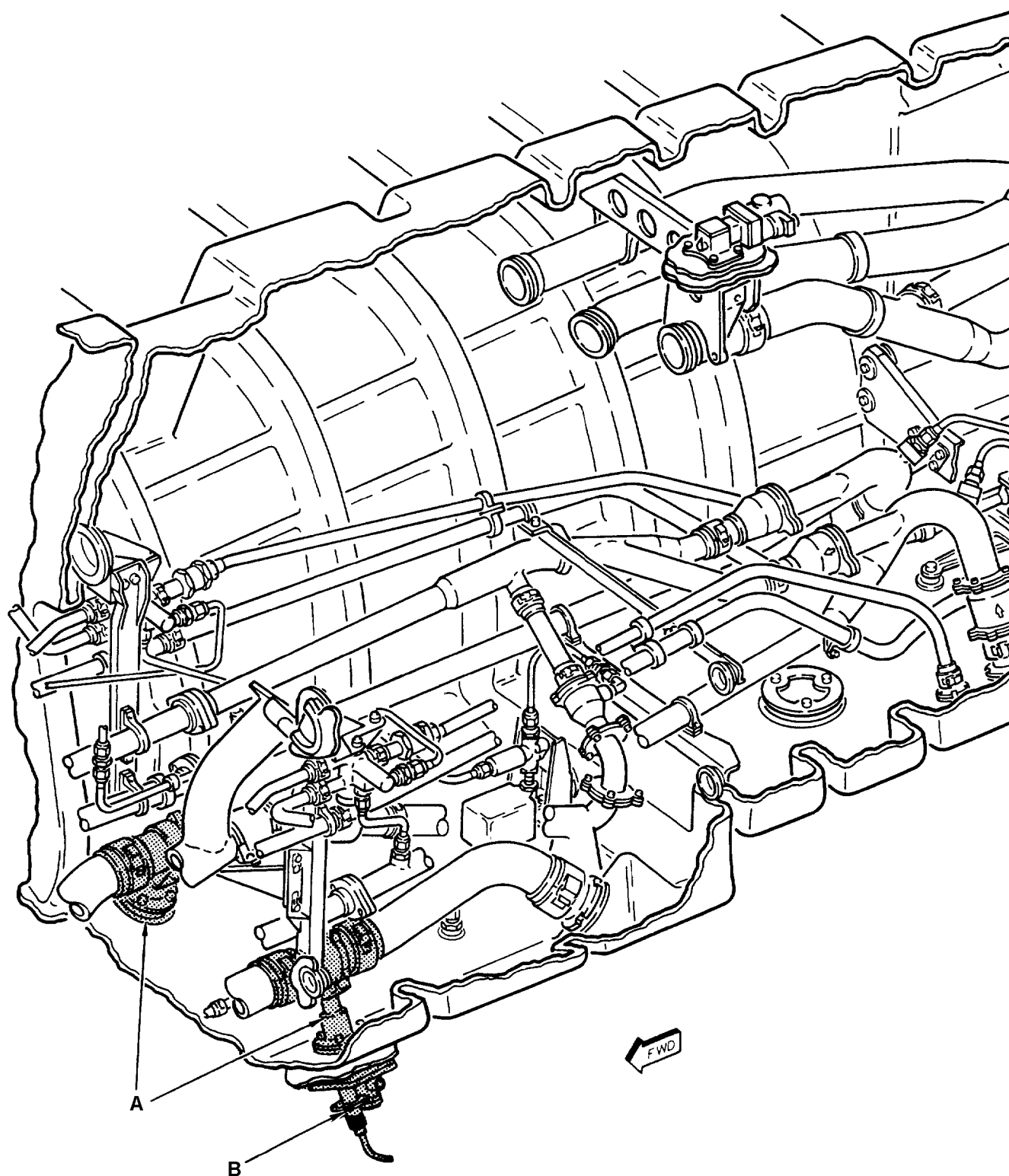


Figure 1. Engine Fuel Shutoff Valve (5B-P072 or 5B-R070) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		ENGINE FUEL SHUTOFF VALVE (5B-P072 OR 5B-R070)			
1	74A586471-1005	. TUBE ASSEMBLY, METAL - FWD FUEL FEED, LH ENG, TANK NO. 4 (76301)	1	*	PAOZZ
	74A586471-1003	. TUBE ASSEMBLY, METAL - FWD FUEL FEED, LH ENG, TANK NO. 4 (76301)	1	*	PAOZZ
	74A587121-1003	. TUBE ASSEMBLY, METAL - ENG FEED RH, TANK NO. 4 (76301)	1	A	XBOZZ
	74A586433-1009	. TUBE ASSEMBLY, METAL - ENG FEED RH, TANK NO. 4 (76301)	1	B	PAOZZ
	74A586433-1005	. TUBE ASSEMBLY, METAL - ENG FEED RH, TANK NO. 4 (76301)	1	B	PAOZZ
2	MS29513-230	. PACKING	4		PAOZZ
3	W901K40DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-40D) (INCLUDES SLEEVE)	2	*	PAOZZ
	14J12-40A	. SEE ABOVE (24984)	2	*	PAOZZ
4	125639-221	. VALVE SUBASSEMBLY (ENGINE FUEL SHUTOFF VALVE, BUTTERFLY VALVE) (73760) (MCDONNELL SPEC 74-580141-221) (REPLACES 125639)	1		PAOZZ
	125639	. SEE ABOVE (MCDONNELL SPEC 74-580141-211) (USE UNTIL EXHAUSTED)	1	C	PAOZZ
5	74A586472-1013	. TUBE ASSY, METAL - LH ENGINE FEED, TANK NO. 4 (76301) (SUPERSEDES 74A586472-1009 AND 74A586472-1011)	1		XBOZZ
	74A586473-1007	. TUBE ASSY, METAL RH ENGINE FUEL FEED, TANK NO. 4 (76301) (SUPERSEDES 74A586473-1005)	1		XBOZZ
6	74A586432-2001	. MOUNT - VALVE, FUEL SHUTOFF, MAIN ENGINE (76301) (TO VALVE)	1		PAOZZ
	NAS673V2	. BOLT (AP)	4		PAOZZ
	AN960JD10L	. WASHER (AP)	4		PAOZZ
7	NAS674V1	. BOLT	4		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 7)	4		PAOZZ
8	M25988/1-214	. PACKING	1		PAOZZ
9	NAS674V4	. BOLT	4		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 9)	4		PAOZZ
10	MS27467T11B35S	. CONNECTOR, PLUG (5P-P072 OR 5P-R070)	1		PAOZZ
11	MA11A1185-223	. ACTUATOR, ELECTRO - MECHANICAL, ROTARY - VALVE, ENG FEED LINE (ENGINE FUEL SHUTOFF VALVE, MOTOR ASSEMBLY) (73760) (MCDONNELL SPEC 74-580141-223) (5B-P072 OR 5B-R070)	1		PAOZZ
	MA11A1185-217	. SEE ABOVE (MCDONNELL SPEC 74-580141-105)	1	*	PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

Figure 1. Engine Fuel Shutoff Valve (5B-P072 or 5B-R070) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

CODE	USABLE ON	MODEL
A	161924 & UP	F/A-18A/B
B	161353 THRU 161761	F/A-18A/B
C	161353 THRU 162414	F/A-18A/B

Figure 1. Engine Fuel Shutoff Valve (5B-P072 or 5B-R070) (Sheet 4)

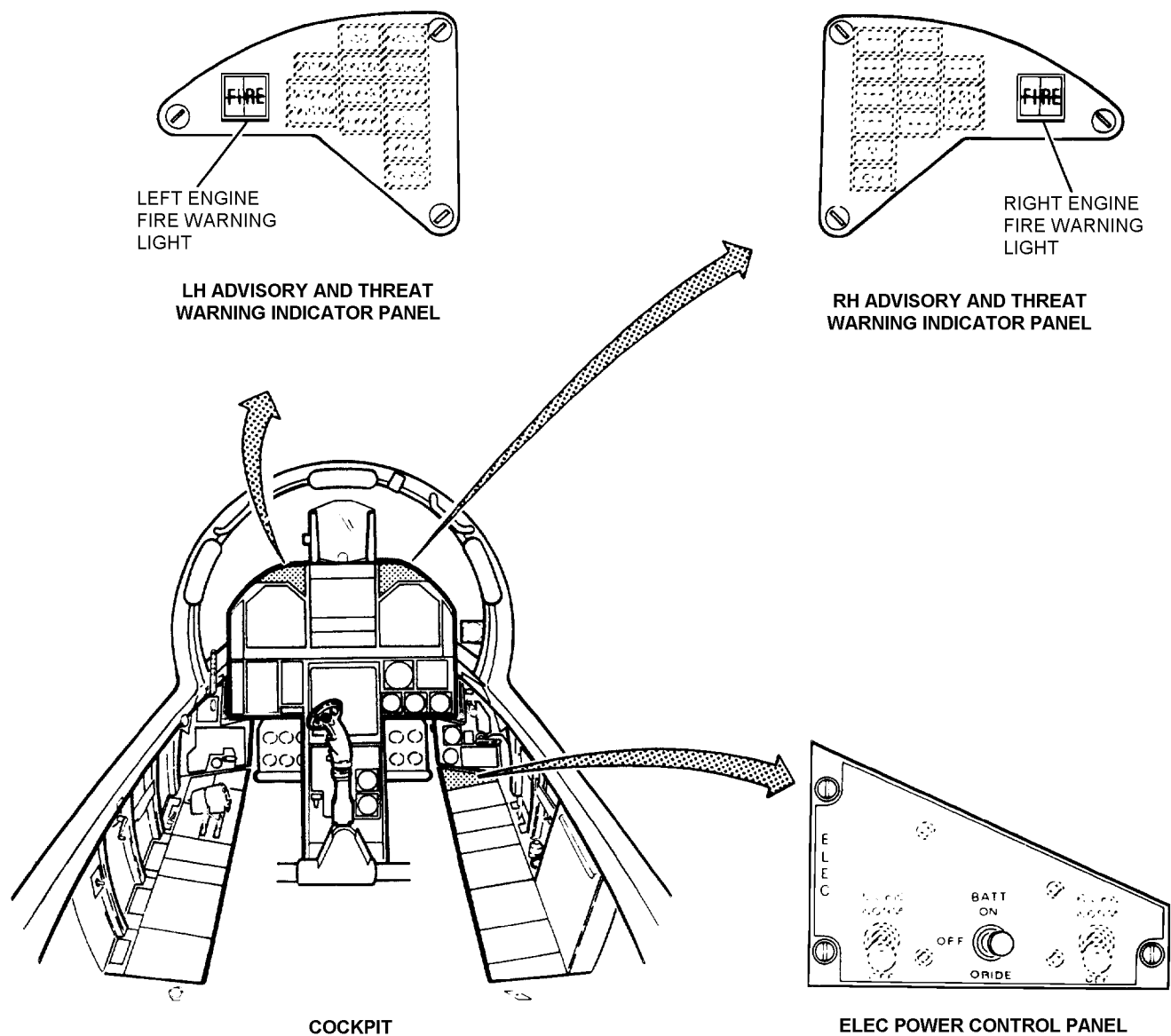


Figure 2. Engine Fuel Shutoff Valve Leak Test (Sheet 1)

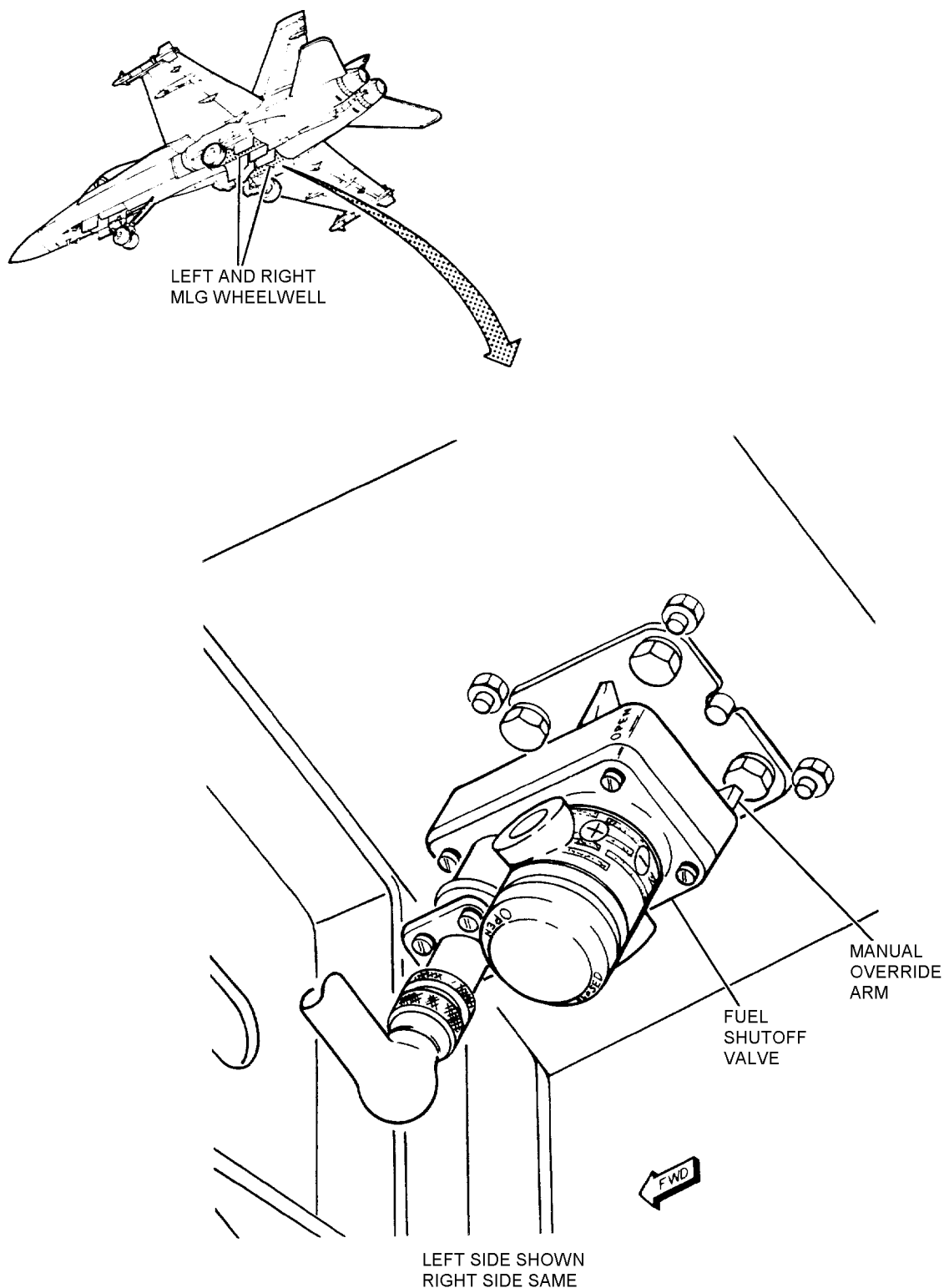


Figure 2. Engine Fuel Shutoff Valve Leak Test (Sheet 2)

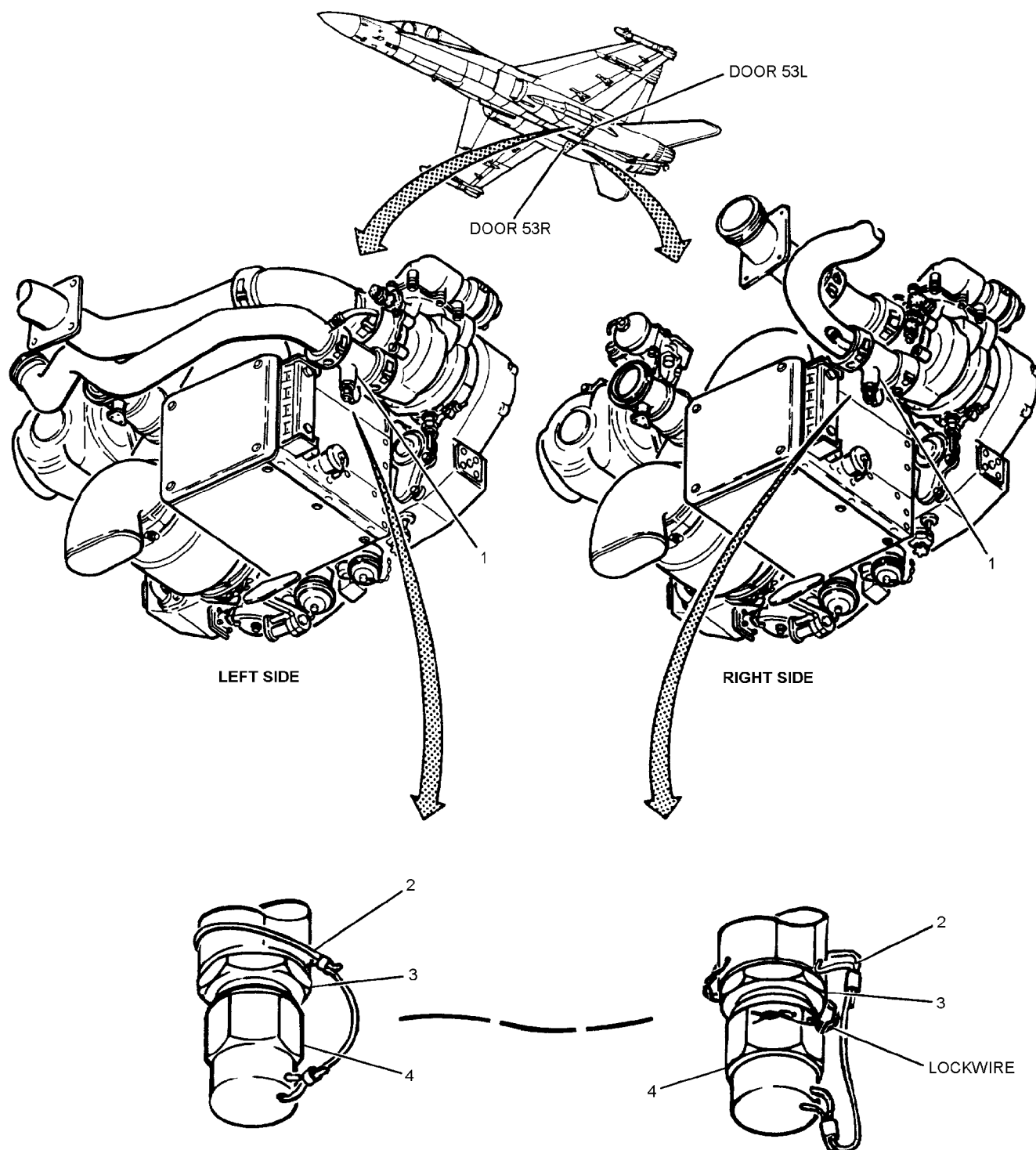


Figure 2. Engine Fuel Shutoff Valve Leak Test (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
1	74A586991-1007	ENGINE FUEL SHUTOFF VALVE LEAK TEST TUBE ASSY, METAL - FUEL, MAIN MOTIVE FLOW BOOST, (LH) (76301) (REPLACES 74A586991-1005)	1		PAOZZ
	74A586991-1005	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	D	PAOZZ
	74A587010-1001	. TUBE ASSY, METAL - FUEL MAIN MOTIVE FLOW BOOST, RH (76301) (REPLACES 74A586991-1007 AND 74A586991-1005)	1	C	PAOZZ
	74A586991-1007	. SEE ABOVE (REPLACES 74A586991-1005) (USE UNTIL EXHAUSTED)	1	B*	PAOZZ
	74A586991-1005	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	A*	PAOZZ
2	9M59-2-140P +	. WIRE ROPE ASSEMBLY (76301)	1		MGOZZ
	9M59-2-400P + +	. WIRE ROPE ASSEMBLY (76301)	1		MGOZZ
	51893	. SWAGING SLEEVE, WIRE (00779) (MCDONNELL SPEC 9M306-6) (USE WITH INDEX 2)	2		PAOZZ
3	AN815-10J	. NIPPLE	1		PAOZZ
	M25988/1-910	. PACKING (USE WITH INDEX 3)	1		PAOZZ
4	74A587050-2001	. CAP ASSEMBLY, DRAIN - TUBE FUEL (76301)	1		XBOZZ
	AN929A10J	. CAP (INCLUDES AN818L10J NUT)	1	*	PAOZZ

ø MADE FROM AN929A110J.

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

+ USE WITH 74A586991-1005 TUBE.

+ +USE WITH 74A586991-1007 &
74A587010-1001 TUBES.

CODE	USABLE ON	MODEL
A	161353 THRU 161528 BEFORE F/A-18 IAFC 100	F/A-18A/B
B	161353 THRU 162907 BEFORE F/A-18 IAFC 100	F/A-18A/B
C	162906 & UP; ALSO 161353 THRU 162907 AFTER F/A-18 IAFC 100	F/A-18A/B
D	161353 THRU 161528	F/A-18A/B

Figure 2. Engine Fuel Shutoff Valve Leak Test (Sheet 4)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
FUEL CROSSFEED SHUTOFF VALVE (5B-P071)
ENGINE FUEL SUPPLY SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Hydraulic Systems	A1-F18AC-450-300
Hydraulic Pump Manifold	WP003 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Secondary Power System	A1-F18AC-240-300
APU	WP003 00
Air Turbine Starter (ATS) and Air Turbine Starter Control Valve (ATSCV)	WP025 00

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 43	30 Sep 86	Replacement of 7M404/7M550 Fuel Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 86	-
F/A-18 IAFC 056	27 Mar 85	Fuel System Components Replacement and System Inspection (ECP MDA F/A-18-0158R1 and ECP MDA-F/A-18-00160)	15 Jul 85	-
F/A-18 IAFC 056 Amend 2	14 Oct 86	Fuel System Components Replacement and System Inspection: Cancellation of Change (Purpose: to Effect Cancellation of Refs A and B) (ECP MDA-F/A-18-00158R1 and ECP MDA-F/A-18-00160)	1 Apr 88	-

Record of Applicable Technical Directives (Cont)

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 70	-	Motive Flow Fuel Boost Pump Pressure Switch Installation of (ECP MDA-F/A-18-0015R28 and ECP MDA-F/A-18-00160)	15 Jul 86	-

Support Equipment Required

Nomenclature	Part Number or Type Designation
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Torque Wrench, 0 to 150 Foot-Pounds	-
External Electrical Power Source	-

Materials Required

Nomenclature	Specification or Part Number
--------------	---------------------------------

Lockwire	MS20995NC32 (CAGE 96906)
Packing (as required)	M25988/1-017
Packing (as required)	M25988/1-214
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).

b. Tag aircraft external power receptacle with an applicable warning to indicate external power is not to be applied to the aircraft.

c. Open doors 10R, 52, and 53L (A1-F18AC-LMM-010).

d. On no. 5 circuit breaker panel assembly (figure 1), open F EXT circuit breaker.

e. Close left and right engine fuel shutoff valves per substeps below:

(1) Apply battery power (A1-F18AC-LMM-000).

(2) On LH and RH advisory and threat warning indicator panel, push L and R engine fire warning lights.

(3) Remove battery power (A1-F18AC-LMM-000).

(4) On no. 5 circuit breaker panel assembly, open L and R FUEL S/O VALVE circuit breakers.

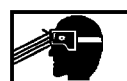
(5) In left and right MLG wheelwell, on fuel shutoff valve, make sure manual override arm is in the CLOSED (-) position (figure 1, sheet 2).

f. Remove left air turbine starter (A1-F18AC-240-300, WP025 00).

g. Remove left hydraulic pump and manifold (A1-F18AC-450-300, WP003 00).

h. Remove APU (A1-F18AC-240-300, WP003 00).

i. Position safety container under valve (4, detail B) to catch residual fuel.



Jet Fuel

7

j. Remove coupling (8 or 13) (WP013 00) and remove packing (7 or 12) next to valve (4).

k. Remove flame cover (5, figure 1, sheet 3) over connector (6, detail B) and disconnect connector (6).

l. Open clamp and position fire detection sensing element clear of valve (4).

NOTE

To permit removal of fuel crossfeed valve, tube and nut must be loosened together as fuel shutoff valve is moved outboard.

m. In APU bay, disconnect tube (1, detail A) and remove nut (2) while moving fuel crossfeed valve (4)

outboard. Then remove fuel crossfeed valve (4) and washer (3).

n. Remove tube (9 or 14, detail B) and packing (10) or packings (12) and coupling (13) (WP013 00).

2. INSTALLATION.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).



Petrolatum

1

b. Lubricate new packings with petrolatum.

c. Prepare mating surfaces of fuel crossfeed valve (4, figure 1, detail B) and aircraft structure for electrical bond (A1-F18AC-LMM-000).

d. Install tube (9 or 14) and packing (10) or packings (12) and inspect, install, and lockwire coupling (13) (WP013 00). (QA)

e. Install flame cover (5, figure 1, sheet 3) on fuel crossfeed valve (4, detail B) and safety with lockwire. (QA) Do not lockwire flame cover over valve connector (6) at this time.

NOTE

To permit installation of fuel crossfeed valve, tube and nut must be tightened together as valve is moved inboard.

f. Install fuel crossfeed valve (4, detail A), nut (2), and washer (3). In APU bay, tighten tube (1) and nut (2) while moving fuel crossfeed valve (4) inboard. Torque nut (2) 75 to 85 foot-pounds. (QA)

g. Position fire detection sensing element and close clamp (detail B).

h. Install packing (7) or packings (12). Inspect, install and lockwire coupling (8) or (13) (WP013 00). (QA)

i. Connect connector (6, detail B) and install flame cover (5, figure 1, sheet 3) over connector (6, detail B). Safety flame cover with lockwire. (QA)

j. Remove no power tag from external power receptacle.

k. Open left and right engine fuel shutoff valves per substeps below:

(1) On no. 5 circuit breaker panel assembly, close L and R FUEL S/O VALVE circuit breakers (figure 1).

(2) Apply battery power (A1-F18AC-LMM-000).

(3) On LH and RH advisory and threat warning indicator panel, release L and R engine FIRE warning lights.

(4) Remove battery power (A1-F18AC-LMM-000).

l. On no. 5 circuit breaker panel assembly, close F EXT circuit breaker.

m. Inspect valve for correct operation per substeps below:

(1) On no. 5 circuit breaker panel assembly, open L and R FUEL S/O VALVE circuit breakers.

(2) Reset nose wheelwell DDI, ID-2150/ASM-612 (A1-F18AC-LMM-000).

(3) Apply external electrical power (A1-F18AC-LMM-000).

(4) Set GND PWR switch 1 to A ON.

(5) On LH advisory and threat warning indicator panel, push L engine FIRE warning light and listen or feel for actuation (close) of fuel crossfeed valve (4, detail B).

(6) Observe nose wheelwell DDI (A1-F18AC-LMM-000). On 163119 AND UP; ALSO 161353 THRU 161924 BEFORE F/A-18 IAFC 056 or 161353 THRU 163118 AFTER F/A-18 AFC 70, code 944 should not be displayed. On 161353 THRU 161924 AFTER F/A-18 IAFC 056 but BEFORE F/A-18 AFC 70 AND 161925 THRU 163118 BEFORE F/A-18 AFC 70, code 944 should be displayed. BEFORE F/A-18 AFC 70 AND 161925 THRU 163118 BEFORE F/A-18 AFC 70, code 944 should not be displayed.

(7) On LH advisory and threat warning indicator panel (figure 1), release L engine FIRE warning light and listen or feel for actuation (open) of fuel crossfeed valve (4, detail B).

(8) Reset nose wheelwell DDI (A1-F18AC-LMM-000). On 163119 AND UP; ALSO 161353 THRU 161924 BEFORE F/A-18 IAFC 056 or 161353 THRU 163118 AFTER F/A-18 AFC 70, code 944 should be displayed. On 161353 THRU 161924 AFTER F/A- 18 IAFC 056 but BEFORE F/A-18 AFC 70 and 161925 THRU 163118 BEFORE F/A-18 AFC 70, code 944 should not be displayed.

(9) Repeat substeps (4) through (7) with RH advisory and threat warning indicator panel and R engine FIRE warning light (figure 1).

(10) Remove external electrical power (A1-F18AC-LMM-000).

(11) On no. 5 circuit breaker panel assembly, close L and R FUEL S/O VALVE circuit breakers and close door 10R (A1-F18AC-LMM-010).

n. Do fuel leak test using right engine (A1-F18AC-LMM-000).

o. Install APU (A1-F18AC-240-300, WP003 00).

p. Install left hydraulic pump and manifold (A1-F18AC-450-300, WP003 00).

q. Install left air turbine starter (A1-F18AC-240-300, WP025 00).

r. Close doors 10L, 52 and 53L (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

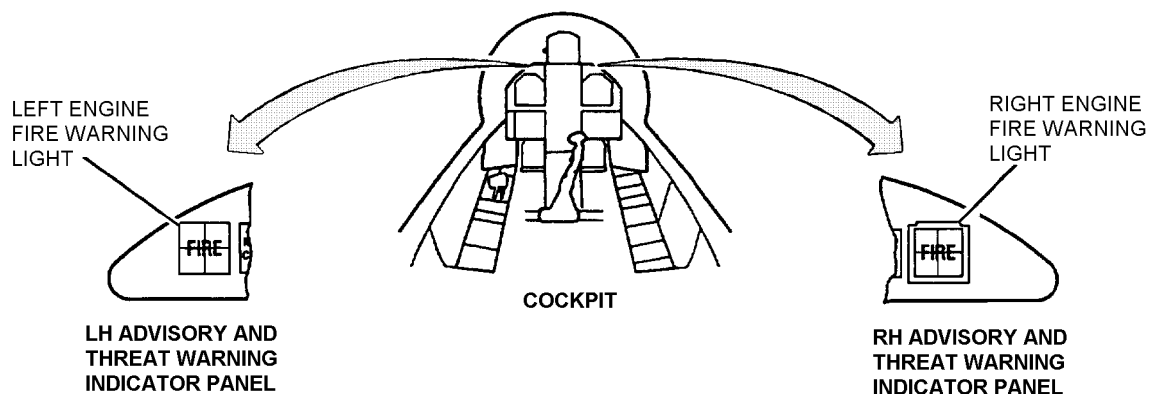
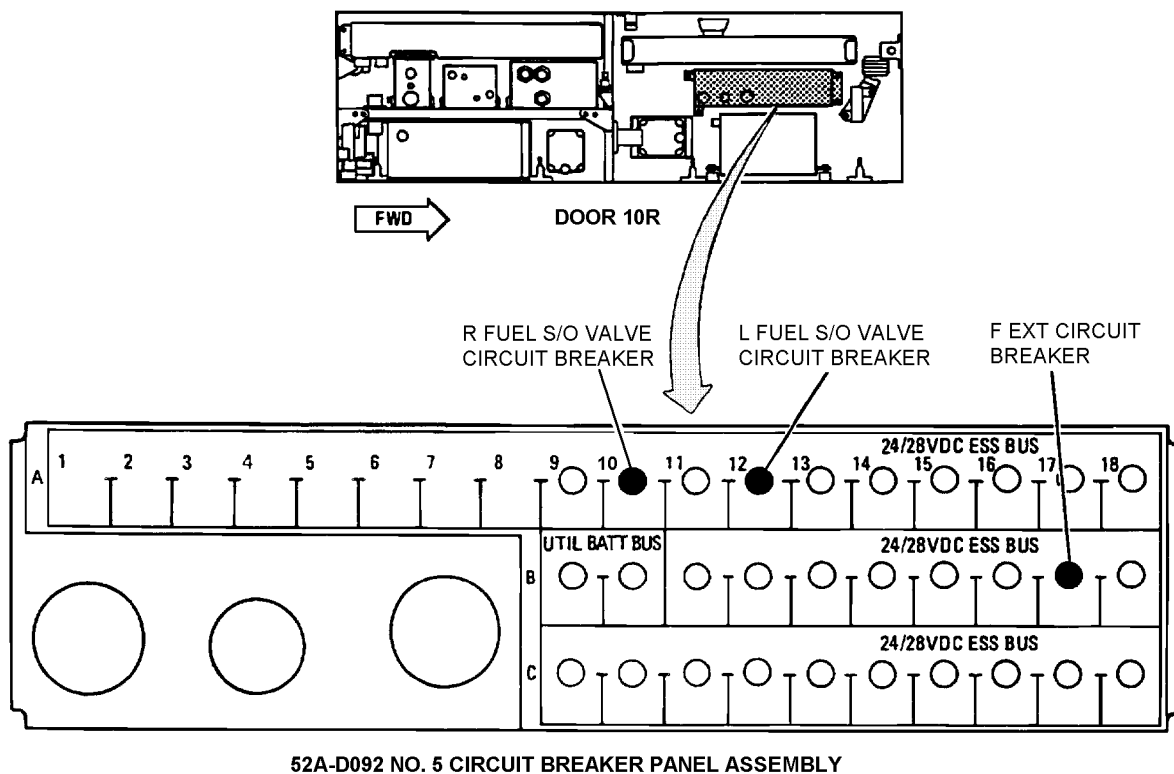


Figure 1. Fuel Crossfeed Shutoff Valve (5B-P071) (Sheet 1)

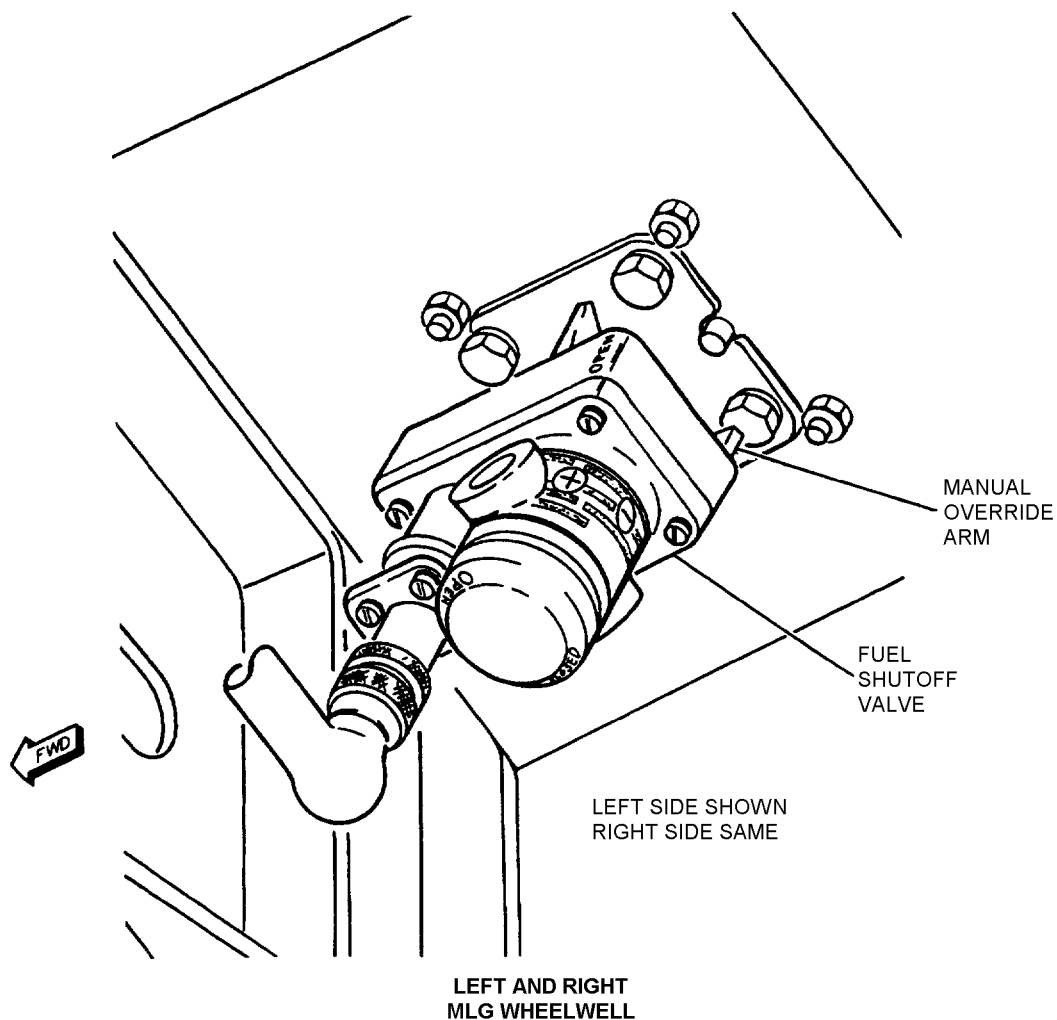


Figure 1. Fuel Crossfeed Shutoff Valve (5B-P071) (Sheet 2)

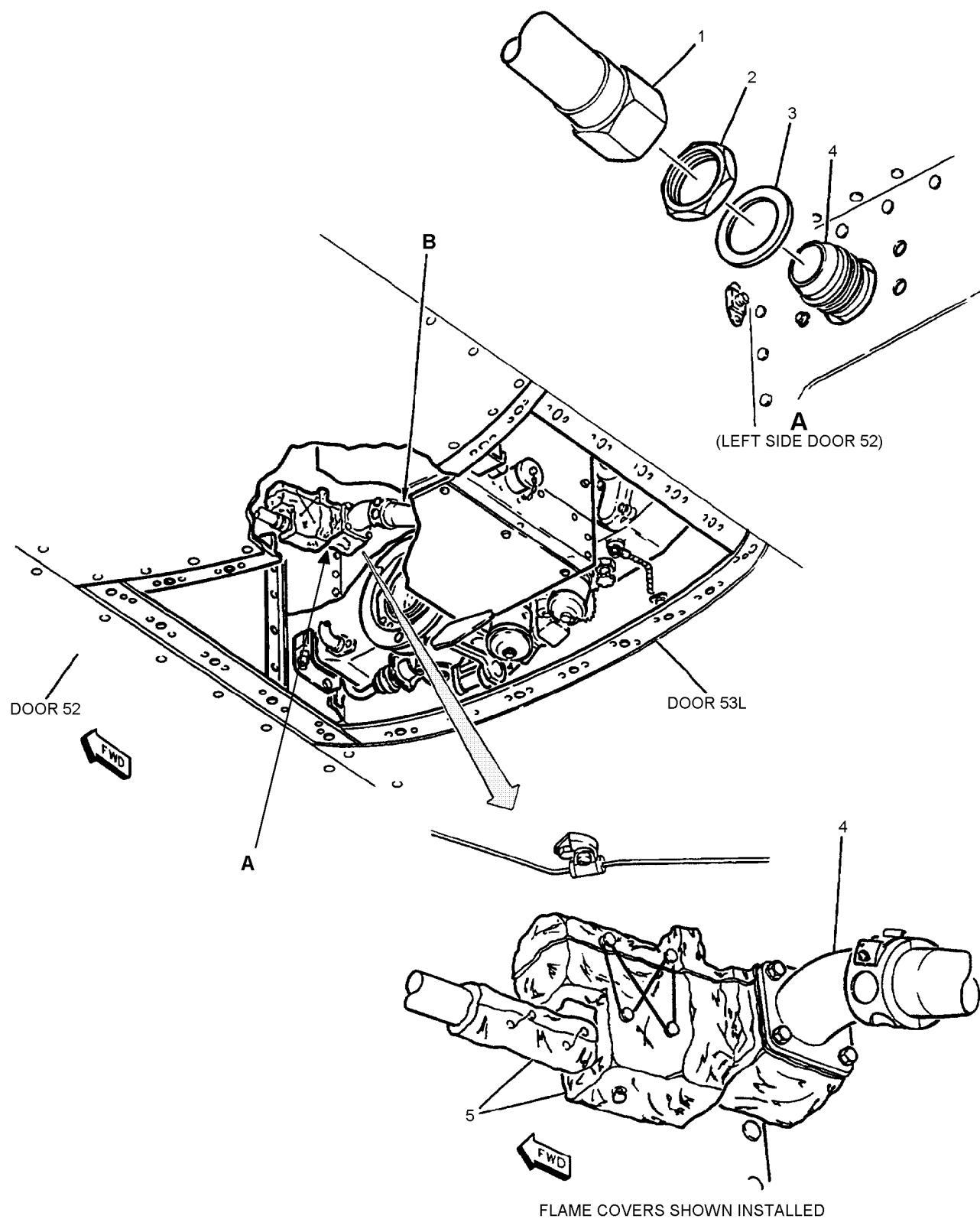


Figure 1. Fuel Crossfeed Shutoff Valve (5B-P071) (Sheet 3)

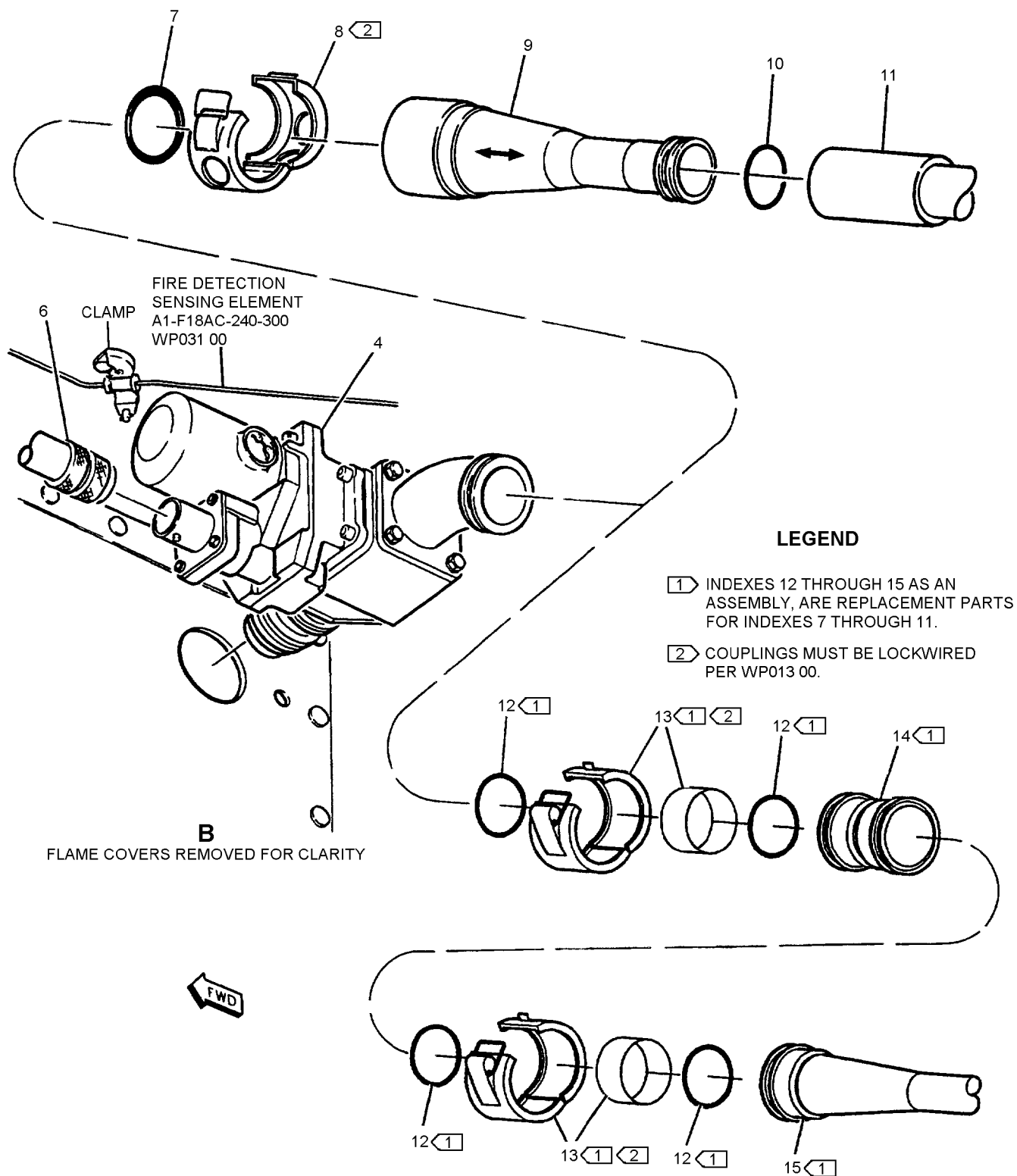


Figure 1. Fuel Crossfeed Shutoff Valve (5B-P071) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		FUEL CROSSFEED SHUTOFF VALVE (5B-P071)			
1	74A586942-1009	. TUBE ASSEMBLY, METAL - FUEL CROSSFEED SHUTOFF VALVE (76301) (REPLACES 74A586942-1007 AND 74A586942-1005)	1		PAOZZ
	74A586942-1007	. SEE ABOVE (REPLACED BY 74A586942-1009) (USE UNTIL EXHAUSTED)	1	*	PAOZZ
	74A586942-1005	. SEE ABOVE (REPLACED BY 74A586942-1007) . . . (USE UNTIL EXHAUSTED)	1	*	PAOZZ
2	AN924-16J	. NUT	1		PAOZZ
3	AN960JD2116	. WASHER	1		PAOZZ
4	AV24B1292C-103	. VALVE, BALL, CROSSFEED, ELECTRICALLY OPERATED (FUEL CROSSFEED SHUTOFF VALVE) (73760) (MCDONNELL SPEC 74-580142-103) (5B-P071)	1		PAOZZ
5	125645B	. COVER, FLAME, VALVE (73760)	1		XAOZZ
6	MS27467T11B35S	. CONNECTOR, PLUG (5P-P071)	1		PAOZZ
7	M25988/1-214	. PACKING	1		PAOZZ
8	W904R16CE	. COUPLING, CLAMP, GROOVED (HALF) (79326) (MCDONNELL SPEC 7M765-16C-1)	1	C*	PAOZZ
	14C12-16C	. COUPLING, CLAMP, GROOVED (HALF) (24984) (MCDONNELL SPEC 7M765-16C-1)	1	C*	PAOZZ
	W904E16CE	. COUPLING, CLAMP, GROOVED (HALF) (79326) (MCDONNELL SPEC 7M550-16C-1)	1	D	PAOZZ
9	74A587004-1005 @	. TUBE ASSEMBLY, METAL - CROSSFEED REDUCER, FUEL LINE (76301) (REPLACES 74A585004-1003 AND 74A585004-1001)	1		PAOZZ
	74A587004-1003 @	. SEE ABOVE (REPLACES 74A587004-1001) (USE UNTIL EXHAUSTED)	1	B	PAOZZ
	74A587004-1001 @	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	A	PAOZZ
10	M25988/1-017 @	. PACKING	1		PAOZZ
11	74A587005-1005 @	. TUBE ASSEMBLY, METAL - CROSSFEED, FUEL LINE (76301) (REPLACES 74A587005-1003 AND 74A587005-1001)	1		PAODD
	74A587005-1003 @	. SEE ABOVE (REPLACES 74A587005-1001) (USE UNTIL EXHAUSTED)	1	B	PAODD
	74A587005-1001 @	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	A	PAODD
12	M25988/1-214	. PACKING	4		PAOZZ
13	901K16CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-16C) (INCLUDES SLEEVE)	2	*	PAOZZ
	14J12-16C	. SEE ABOVE (24984)	2	*	PAOZZ
14	74A587011-1001	. FERRULE (76301) (IDLER TUBE)	1		PAOZZ
15	74A587005-1007	. TUBE ASSEMBLY METAL (76301)	1		PAODD

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

@ THESE PARTS MUST BE REPLACED AS
AN ASSEMBLY. SEE WP136 01 FIGURE 2
FOR INSTRUCTIONS.

Figure 1. Fuel Crossfeed Shutoff Valve (5B-P071) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

CODE	USABLE ON	MODEL
A	161353 THRU 161924 BEFORE F/A-18 IAFC 056	F/A-18A/B
B	161925 THRU 162477 161353 THRU 161924 AFTER F/A-18 IAFC 056	F/A-18A/B
C	161924 & UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 43	F/A-18A/B
D	161353 THRU 161761 BEFORE F/A-18 AFC 43	F/A-18A/B

Figure 1. Fuel Crossfeed Shutoff Valve (5B-P071) (Sheet 6)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
FUEL CROSSFEED TUBE
INTERNAL FUEL TRANSFER SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Aircraft Corrosion Control	A1-F18AC-SRM-500
Finish System	WP012 00
General Information	A1-F18AC-SRM-200
Forming Sheet Metal	WP004 01
Line Maintenance Procedures	A1-F18AC-LMM-000
Secondary Power System	A1-F18AC-240-300
AMAD	WP020 00
Structural Hardware	NAVAIR 01-1A-8

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 IAFC 056	27 Mar 85	Fuel System Components Replacement and System Inspection (ECP MDA-F/A-1800158R1 AND ECP MDA-F/A-18-00160)	15 Jul 85	-
F/A-18 IAFC 056 Amend 2	14 Oct 86	Fuel System Components Replacement and System Inspection: Cancellation Of Change (Purpose: to Effect Cancellation of Refs A and B) (ECP MDA-F/A-18-00158R1 AND ECP MDA-F/A-18-00160)	1 Apr 88	-

1. FUEL CROSSFEED TUBE USING REDUCER.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC20 (CAGE 96906)
Packing	M25988/1-017
Packing (3)	M25988/1-214
Petrolatum, Technical	VV-P-236 (CAGE 81348)
Rivet (2)	MS20470AD4

2. REMOVAL.

- Make sure hydraulic and electrical power are removed (A1-F18AC-LMM-000).
- Remove AMAD (A1-F18AC-240-300, WP020 00).
- Remove coupling (2, figure 1, detail A) (WP013 00) and packing (1).
- Remove coupling (6, detail B) (WP013 00) and packings (1).
- Remove clamps (7) and attaching parts.
- Remove clamp (8, detail C) and attaching parts and remove tubes (3 and 5, detail A).

3. INSTALLATION.

- Make sure hydraulic and electrical power are removed (A1-F18AC-LMM-000).



Petrolatum



1

- Lubricate new packings with petrolatum.
- Install packing (4, figure 1, detail A) and position tubes (3 and 5) in AMAD bay.
- Loosely install clamps (7, detail B) and attaching parts on tube (5).
- Install packings (1, details A and B) and inspect, install, and lockwire couplings (2 and 6) (WP013 00). (QA)
- Loosely install clamp (8, detail C) and attaching parts on bracket.
- Inspect for misalignment of tubes (3 and 5, detail D) by using 0.020 inch lockwire and by doing substeps below:
 - Inspect the gap between tube (3) and tube (5) by fully inserting 0.020 inch lockwire and moving around the circumference of tubes (3 and 5) joint.
 - If gaps of 0.020 inch exist, tighten bolts on clamps (7 and 8, details B and C) and go to step i.
 - If gaps of 0.020 inch do not exist, go to step h.
- If tubes (3 and 5, detail D) are misaligned, do substeps below:
 - Remove clamp (8) and attaching parts at bracket (detail C).
 - Remove rivets (NAVAIR 01-1A-8) and remove bracket.
 - Make new bracket per figure 1, sheet 3 (A1-F18AC-SRM-200, WP004 01).
 - Paint new bracket before installation (A1-F18AC-SRM-500, WP012 00).
 - Position new bracket on structure and install rivets (NAVAIR 01-1A-8) in existing rivet holes.

NOTE

Due to tolerance buildup of replacement tube assembly, it may be necessary to add AN960JD10 or AN960JD10L washers (stack length not to exceed 1/4-inch) between clamp and mating structure. If washers are used, bolt length must be adjusted to meet grip length requirements (NAVAIR 01-1A-8).

(6) Install clamp (8) and attaching parts, on tube (5, detail B) at bracket.

(7) If clamp (8, detail C) installation requires adjustment, add AN960JD10 or AN960JD10L washers and adjust bolt length as required to install clamp (8) as stated in substep (6).

(8) Tighten bolts on clamps (7 and 8, details B and C).

(9) Inspect for misalignment per step g.

i. Install AMAD (A1-F18AC-240-300, WP020 00).

4. FUEL CROSSFEED TUBE USING IDLER.**Support Equipment Required**

None

Materials Required

Nomenclature	Specification or Part Number
Packing (6)	M25988/1-214
Petrolatum, Technical	VV-P-236 (CAGE 81348)
Rivet (2)	MS20470AD4

5. REMOVAL.

a. Make sure hydraulic and electrical power are removed (A1-F18AC-LMM-000).

b. Remove AMAD (A1-F18AC-240-300, WP020 00).

c. Remove coupling (12, figure 2, detail B) (WP013 00) and packings (11) at crossfeed manifold.

d. Remove coupling (9, detail A) (WP013 00) and packings (8) at fuel crossfeed shutoff valve.

e. Remove bolts (5 and 7, figure 2) and attaching parts and remove clamps (4 and 6).

f. Remove bolt (1) and attaching part, remove clamp (2), and remove tube (3, detail A) with idler tube (10).

g. Remove coupling (9) and packing (8) and remove idler tube (10) from tube (3).

6. INSTALLATION.

a. Make sure hydraulic and electrical power is removed (A1-F18AC-LMM-000).



Petrolatum

1

b. Lubricate new packings with petrolatum.

c. Position tube (3, figure 2), clamps (2, 4, and 6), and attaching parts with bolts (1, 5, and 7) loosely installed.

d. Install packings (11, detail B) and inspect, install, and lockwire coupling (12) (WP013 00) on crossfeed manifold and tube (3). (QA)

e. Install packings (8, detail A) on fuel crossfeed shutoff valve, idler (10), and tube (3).

f. Install coupling (9) sleeve over crossfeed shutoff valve past end fitting.

g. Install coupling (9) sleeve over tube (3) past end fitting.

h. Position idler (10) against tube (3) and temporarily install coupling (9), without sleeve, to hold idler (10) in place.

i. Hold idler (10) firmly against tube (3) and slide coupling (9) sleeve on crossfeed shutoff valve onto idler (10) without using force or preloading the installation. If idler (10) aligns with crossfeed shutoff valve, go to step l.

NOTE

Due to tolerance buildup of replacement tube assembly, it may be necessary to add AN960JD10 or AN960JD10L washers (stack length not to exceed 1/4-inch) between clamp and mating structure. If washers are used, bolt length must be adjusted to meet grip length requirements (NAVAIR 01-1A-8).

j. If idler tube (10) and crossfeed shutoff valve do not align with each other, add washers or remove spacers at clamps (2, 4, and 6, figure 2) in order to adjust idler tube (10, detail A) and tube (3) alignment until idler aligns with crossfeed shutoff valve, step i.

k. If idler (10) and crossfeed manifold still do not align, do substeps below:

(1) Remove bolt (1, figure 1) attaching parts and clamp (2) at bracket.

(2) Remove rivets (NAVAIR 01-1A-8) and remove bracket.

(3) Make new bracket per figure 1, sheet 3 (A1-F18AC-SRM-200, WP004 01).

(4) Paint new bracket before installation (A1-F18AC-SRM-500, WP012 00).

(5) Position new bracket on structure and install rivets (NAVAIR 01-1A-8) in existing rivet holes.

NOTE

Due to tolerance buildup of replacement tube assembly, it may be necessary to add AN960JD10 or AN960JD10L washers (stack length not to exceed 1/4-inch) between clamp and mating structure. If washers are used, bolt length must be adjusted to meet grip length requirements (NAVAIR 01-1A-8).

(6) Install bolt (1, figure 2) and attaching parts, and clamp (2) on tube (3) at bracket.

(7) If clamp (2) installation requires adjustment, add AN960JD10 or AN960JD10L washers and adjust bolt (1) length as required to install clamp (2) as stated in substep (6).

l. Tighten bolts (1, 5, and 7).

m. Remove coupling (9), then slide coupling (9) sleeves in place and inspect, install, and lockwire couplings (9) (WP013 00). (QA)

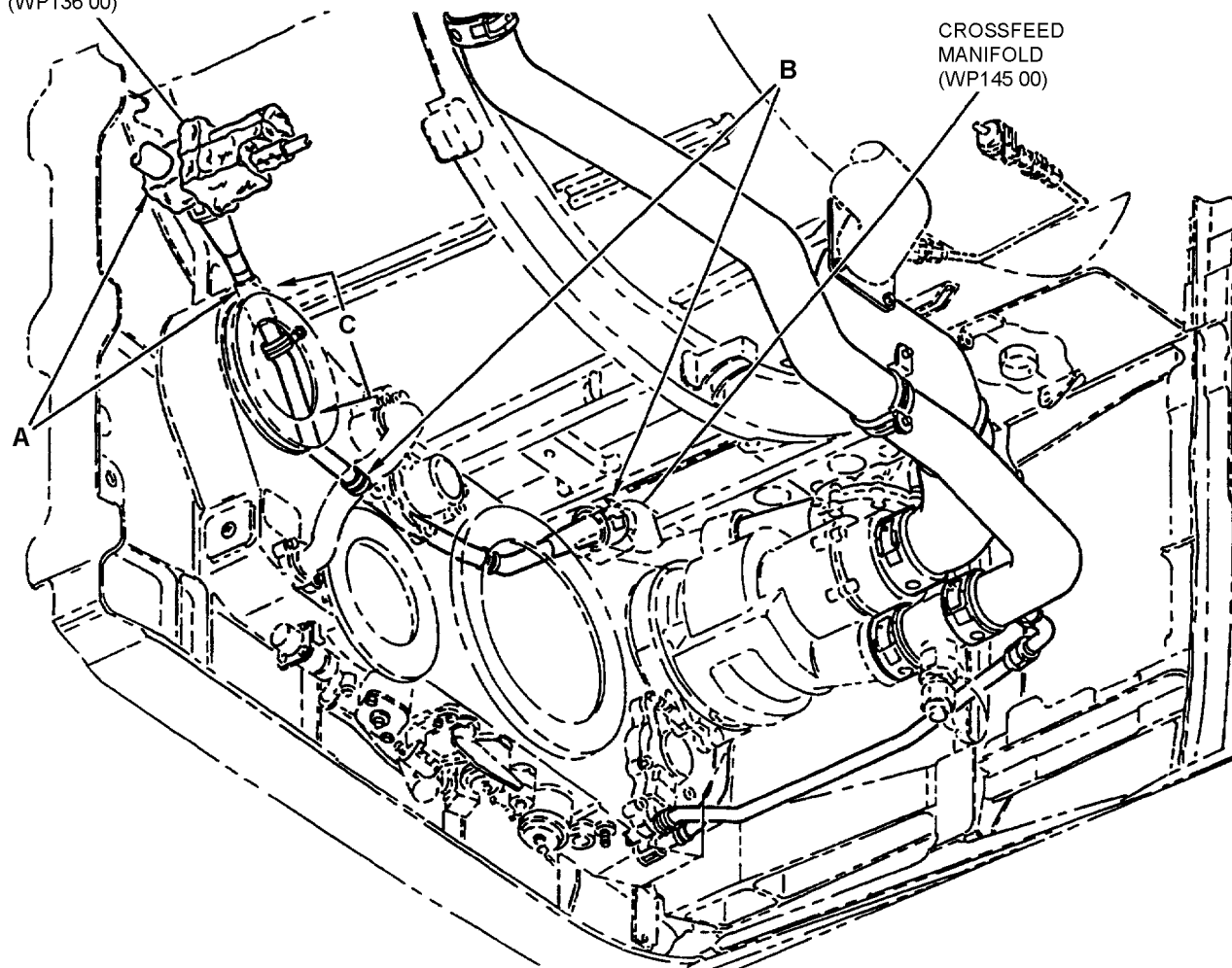
n. Install AMAD (A1-F18AC-240-300, WP020 00).

7. ILLUSTRATED PARTS BREAKDOWN.

8. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

FUEL CROSSFEED
SHUTOFF VALVE
(WP136 00)

CROSSFEED
MANIFOLD
(WP145 00)



VIEW THRU DOOR 53L

Figure 1. Fuel Crossfeed Tube Using Reducer (Sheet 1)

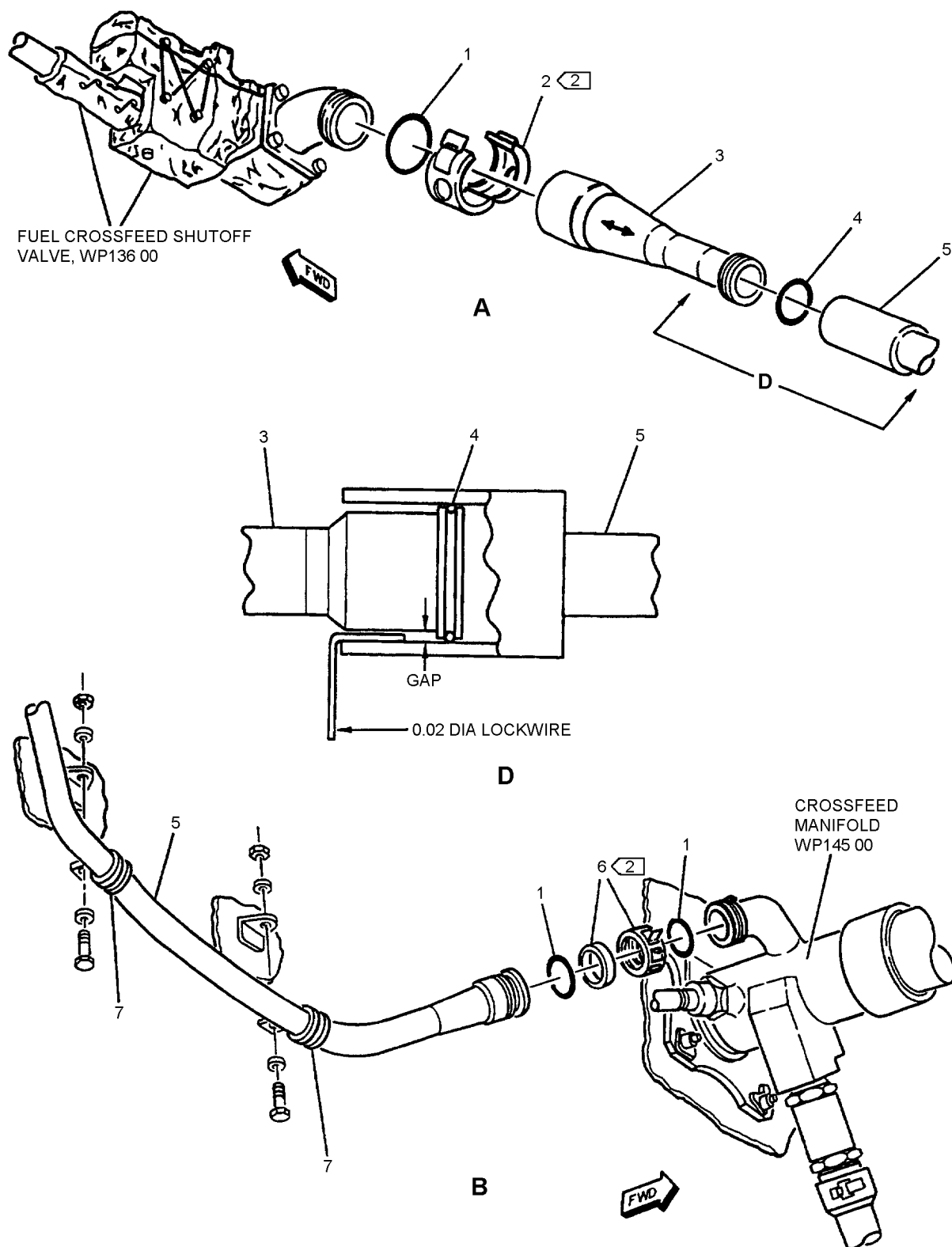
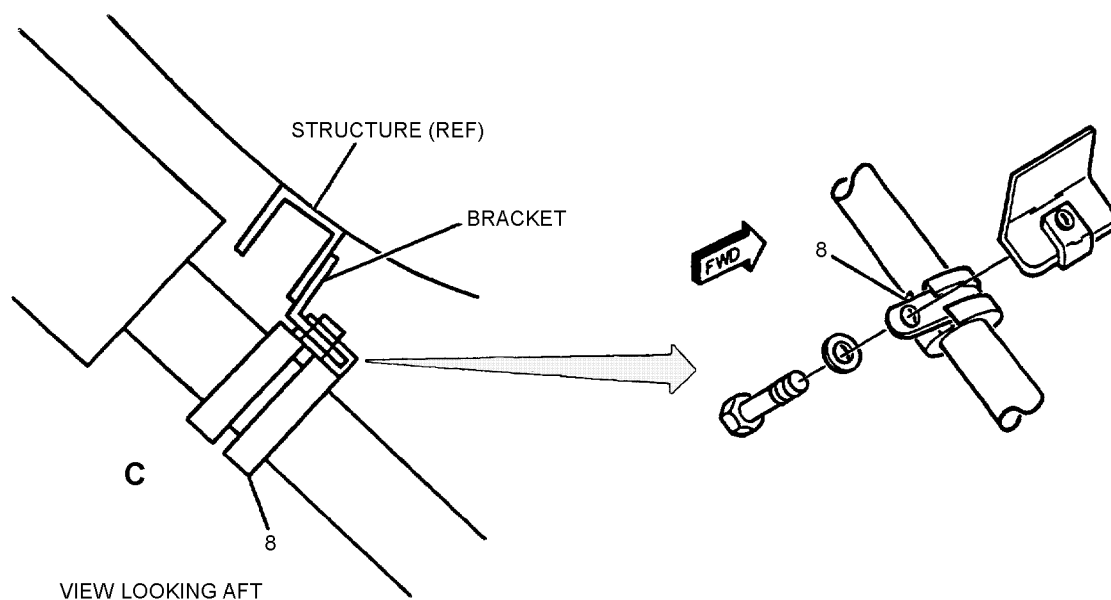


Figure 1. Fuel Crossfeed Tube Using Reducer (Sheet 2)

**LEGEND**

1. ALL DIMENSIONS ARE IN INCHES.

2 COUPLINGS MUST BE LOCKWIRED PER WP013 00.

BRACKET

MANUFACTURE BRACKET USING 6061-T4 0.071 INCH ALUMINUM WITH A BEND RADIUS OF 0.25 INCH.

BRAKE TYPE	DIM. A
CORNICE BRAKE BAR FOLDER BOX BRAKE	0.87
VERTICAL BRAKE PRESS BRAKE "V" BRAKE PRODUCTION MACHINE	0.82

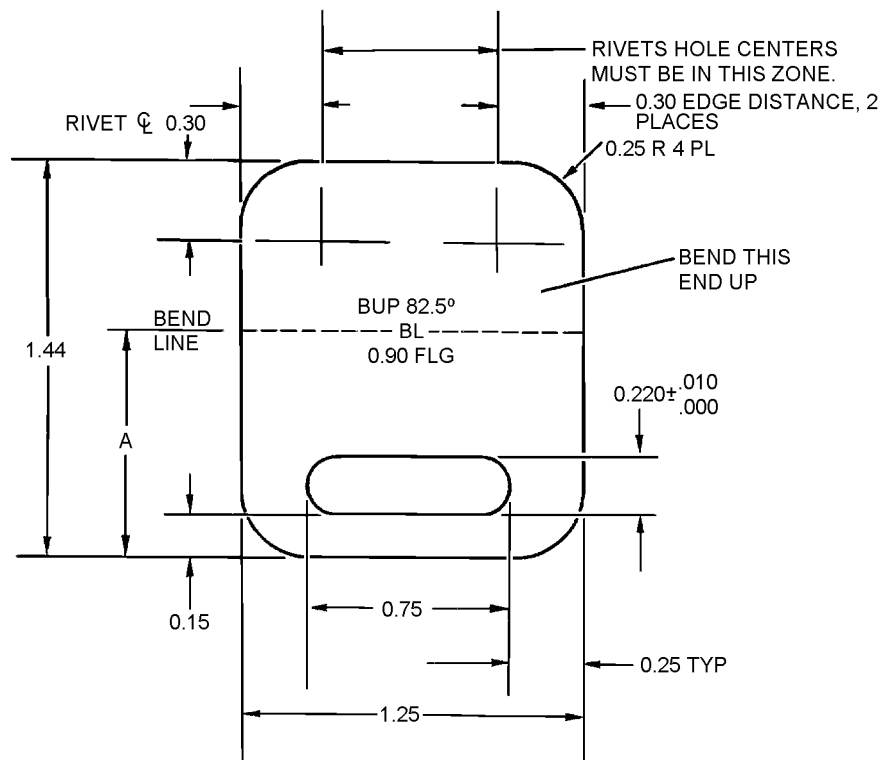


Figure 1. Fuel Crossfeed Tube Using Reducer (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		FUEL CROSSFEED TUBE USING REDUCER			
1	M25988/1-214	. PACKING	3		PAOZZ
2	W904K16CE @	. COUPLING, CLAMP, GROOVED (HALF)	1	*	PAOZZ
		(MCDONNELL SPEC 7M765-16C-1)			
	14C12-16C @	. SEE ABOVE (24984)	1	*	PAOZZ
3	74A587004-1001 @	. TUBE ASSEMBLY, METAL - CROSSFEED	1	A	PAOZZ
		REDUCER, FUEL LINE (76301)			
		(REPLACED BY 74A587004-1003)			
	74A587004-1003 @	. SEE ABOVE (76301) (REPLACED BY	1	B	PAOZZ
		74A587004-1005)			
	74A587004-1005 @	. SEE ABOVE (76301) (REPLACES	1	C	PAOZZ
		74A587004-1003)			
4	M25988/1-017 @	. PACKING	1		PAOZZ
5	74A587005-1001 @	. TUBE ASSEMBLY, METAL - CROSSFEED,	1	A	PAODD
		FUEL LINE (FUEL CROSSFEED TUBE)			
		(76301) (REPLACED BY 74A587005-1003)			
	74A587005-1003 @	. SEE ABOVE (76301) (REPLACED BY	1	E	PAODD
		74A587005-1005)			
	74A587005-1005 @	. SEE ABOVE (76301) (REPLACES	1	F	PAODD
		74A587005-1003)			
6	W901K16CE	. COUPLING, CLAMP, GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M765-16C)			
		(INCLUDES SLEEVE)			
	14J12-16C	. SEE ABOVE (24984)	1	*	PAOZZ
7	JM44LC44WD8	. CLAMP, LOOP (22175) (MCDONNELL	2	E*	PAOZZ
		SPEC ST9M630D8)			
	830WD8G	. SEE ABOVE (83930)	2	E*	PAOZZ
	JM44LC44WD10	. CLAMP, LOOP (22175) (MCDONNELL	2	D*	PAOZZ
		SPEC ST9M630D10)			
	830WD10G	. SEE ABOVE (83930)	2	D*	PAOZZ
	NAS673Y3	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	4		PAOZZ
	NAS1291C3M	. NUT (AP)	2		PAOZZ
8	JM44LC44WD8	. CLAMP, LOOP (22175) MCDONNELL	1	A*	PAOZZ
		SPEC ST9M630DB			
	830WD8G	. SEE ABOVE (83930)	1	A*	PAOZZ
	JM44LC44WD10	. CLAMP, LOOP (22175) (MCDONNELL	1	D*	PAOZZ
		SPEC ST9M630D10)			
	830WD10G	. SEE ABOVE (83930)	1	D*	PAOZZ
	NAS673V3	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
	A11144-7-3	. NUT, CLIP (AP) (72962) (MCDONNELL	1	*	PAOZZ
		SPEC ST3M523C3M)			
	130091	. SEE ABOVE (76530)	1	*	PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

@ THESE COMPONENTS MUST BE REPLACED
BY COMPONENTS IN FIGURE 2.

CODE	USABLE ON	MODEL
A	161353 THRU 161924 BEFORE F/A-18 IAFC-056	F/A-18A/B

Figure 1. Fuel Crossfeed Tube Using Reducer (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		B						161925 THRU 163118; ALSO 161353 THRU 161924 AFTER F/A-18 IAFC-056		F/A-18A/B	
		C						163119 & UP		F/A-18A/B	
		D						161925 & UP; ALSO 161353 THRU 161924 AFTER F/A-18 IAFC-056		F/A-18A/B	
		E						161925 THRU 162881 ALSO 161353 THRU 161924 AFTER F/A-18 IAFC 056		F/A-18A/B	
		F						162882 & UP		F/A-18A/B	

Figure 1. Fuel Crossfeed Tube Using Reducer (Sheet 5)

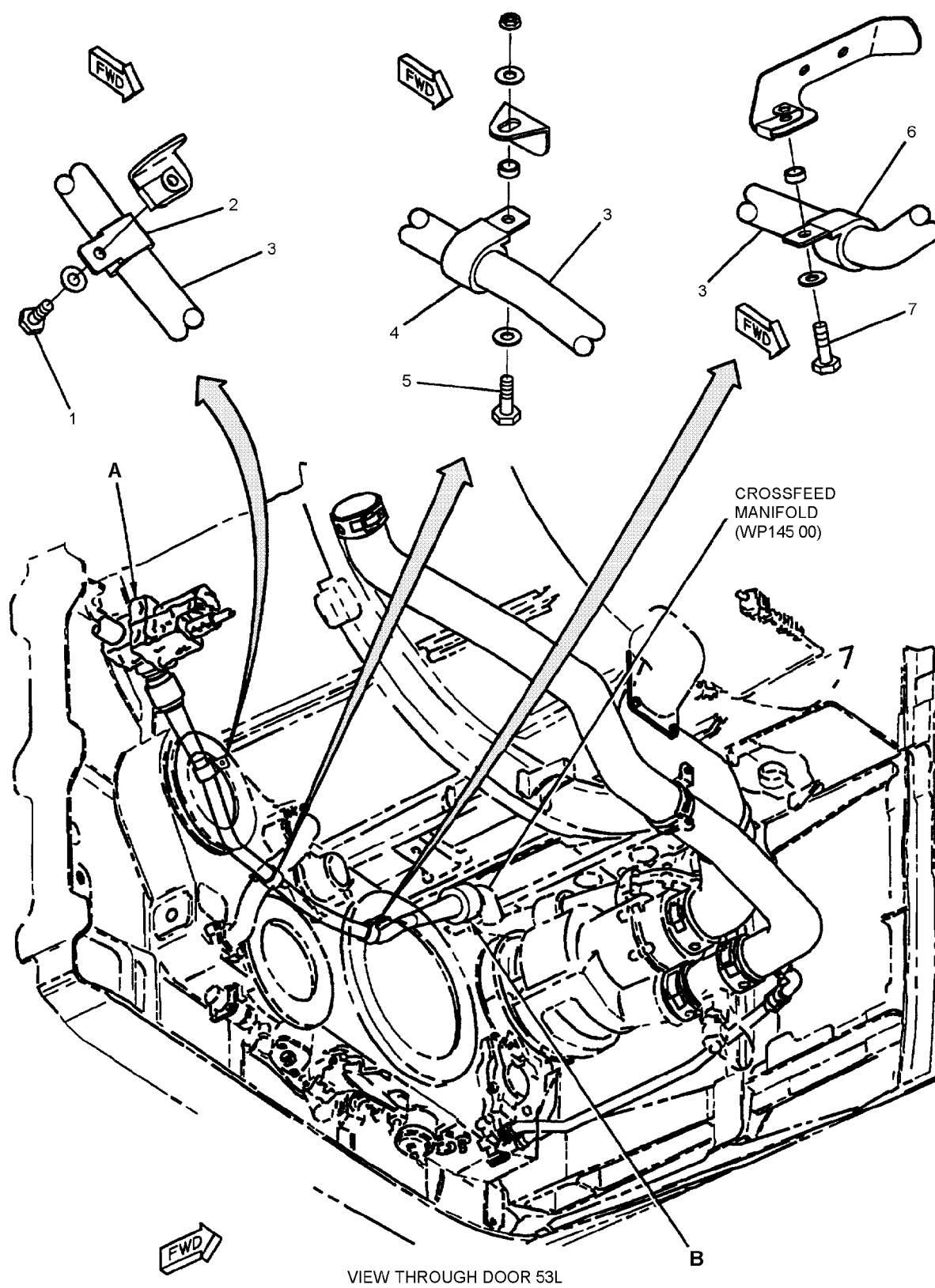


Figure 2. Crossfeed Tube Using Idler (Sheet 1)

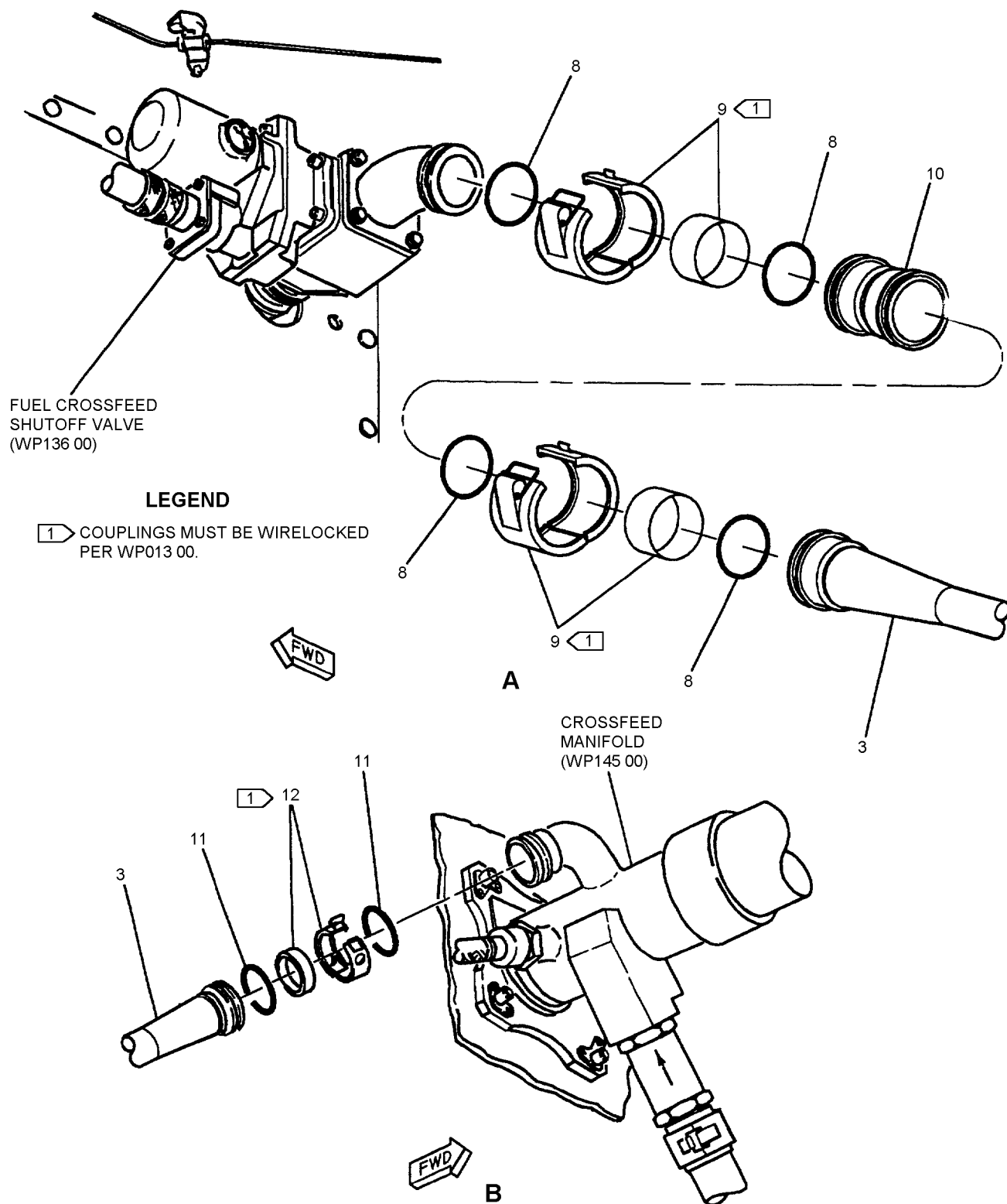


Figure 2. Fuel Crossfeed Tube Using Idler (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		FUEL CROSSFEED TUBE USING IDLER			
1	NAS673V3	. BOLT	1		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 1)	1		PAOZZ
	A11144-7-3	. NUT, CLIP (72962) (MCDONNELL SPEC ST3M523C3M) (USE WITH INDEX 1)	1	*	PAOZZ
	130091	. SEE ABOVE (76530)	1	*	PAOZZ
2	JM44LC44WD10	. CLAMP, LOOP (22175) (MCDONNELL SPEC ST9M630D10)	1	*	PAOZZ
	830WD10G	. SEE ABOVE (83930)	1	*	PAOZZ
3	74A587005-1007	. TUBE ASSEMBLY METAL (76301)	1		PAODD
4	JM44LC44WD10	. CLAMP, LOOP (22175) (MCDONNELL SPEC ST9M630D10)	1	*	PAOZZ
	830WD10G	. SEE ABOVE (83930)	1	*	PAOZZ
5	NAS673V5	. BOLT	1		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 5)	2		PAOZZ
	NAS43DD3-8	. SPACER (USE WITH INDEX 5)	1		PAOZZ
	NAS1291C3M	. NUT (USE WITH INDEX 5)	2		PAOZZ
6	JM44LC44WD10	. CLAMP, LOOP (22175) (MCDONNELL SPEC ST9M630D10)	1		PAOZZ
	830WD10G	. SEE ABOVE (83930)	1		PAOZZ
7	NAS673V5	. BOLT	1		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 7)	1		PAOZZ
	NAS43DD3-8	. SPACER (USE WITH INDEX 7)	1		PAOZZ
	NAS1291C3M	. NUT (USE WITH INDEX 7)	1		PAOZZ
8	M25988/1-214	. PACKING	4		PAOZZ
9	W901K16CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-16C) (INCLUDES SLEEVE)	2	*	PAOZZ
	14J12-16C	. SEE ABOVE (24984)	2	*	PAOZZ
10	74A587011-1001	. FERRULE (76301) (IDLER TUBE)	1		PAOZZ
11	M25988/1-214	. PACKING	2		PAOZZ
12	W901K16CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-16C) (INCLUDES SLEEVE)	1	*	PAOZZ
	14J12-16C	. SEE ABOVE (24984)	1	*	PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

Figure 2. Crossfeed Tube Using Idler (Sheet 3)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
FUEL FEED LINE TEMPERATURE SENSOR (5A-P111 OR 5A-R112)
ENGINE FUEL SUPPLY SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Motive Flow/Boost Pump	WP138 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

None

1. LEFT FUEL FEED LINE TEMPERATURE SENSOR-161353 THRU 161741.

Support Equipment Required

Nomenclature	Part Number or Type Designation
--------------	---------------------------------

Torque Wrench, 0 to 200 Inch-Pounds	-
---	---

Materials Required

Nomenclature	Specification or Part Number
--------------	------------------------------

Packing	M2598B/1-904
Petrolatum, Technical	VV-P-236 (CAGE 81348)

2. REMOVAL.

- Remove left motive flow/boost pump (WP138 00).
- Remove attaching parts from clamps (6 and 8, figure 1, details C and D).
- Disconnect sensor (1, detail B) connector from connector (3).
- Remove sensor (1, detail A) from crossfeed manifold.

3. INSTALLATION.

- Prepare mating surfaces of sensor (1, figure 1, detail A) and crossfeed manifold for electrical bond (A1-F18AC-LMM-000).



Petrolatum

1

- Lubricate packing (2) with petrolatum and install on sensor (1).

NOTE

Sensor may appear to be completely tightened when self-locking part of threads contact crossfeed manifold.

- Install sensor (1) making sure sensor is completely tightened in crossfeed manifold. Torque sensor 100 to 130 inch-pounds. (QA)

- Install clamps (6 and 8, details C and D) and attaching parts.

- Connect sensor (1, detail B) connector to connector (3).

- Install left motive flow/boost pump (WP138 00).

- Do fuel leak test (A1-F18AC-LMM-000).

- Reset Digital Display Indicator ID-2150/ASM-612 in nose wheelwell (A1-F18AC-LMM-000).

- Operate engines (A1-F18AC-LMM-000).

- Make sure 658 failure code does not appear on Digital Display Indicator ID-2150/ASM-612 in nose wheelwell (A1-F18AC-LMM-000).

- Shut down engines (A1-F18AC-LMM-000).

- Close door 53L (A1-F18AC-LMM-010).

4. LEFT FUEL FEED LINE TEMPERATURE SENSOR 161742 AND UP.

Support Equipment Required

Nomenclature	Part Number or Type Designation
--------------	---------------------------------

Torque Wrench, 0 to 200 Inch-Pounds	-
---	---

Materials Required

Nomenclature	Specification or Part Number
--------------	------------------------------

Packing	M25988/1-904
Petrolatum, Technical	VV-P-236 (CAGE 81348)

5. REMOVAL.

- a. Remove left motive flow/boost pump (WP138 00).
- b. Remove attaching parts from clamps (3, 7, and 8, figure 2, details B, C, and D).
- c. Disconnect sensor (1, detail B) connector from connector (6).
- d. Remove sensor (1, detail A) from crossfeed manifold.

6. INSTALLATION.

- a. Prepare mating surfaces of sensor (1, figure 2, detail A) and crossfeed manifold for electrical bond (A1-F18AC-LMM-000).



Petrolatum

1

- b. Lubricate packing (2) with petrolatum and install on sensor (1).

NOTE

Sensor may appear to be completely tightened when self-locking part of threads contact crossfeed manifold.

- c. Install sensor (1), making sure sensor is completely tightened in crossfeed manifold. Torque sensor 100 to 130 inch-pounds. (QA)

- d. Install clamps (3, 7, and 8, details B, C, and D) and attaching parts.

- e. Connect sensor (1, detail B) connector to connector (6).

- f. Install left motive flow/boost pump (WP138 00).

- g. Do fuel leak test (A1-F18AC-LMM-000).

- h. Reset Digital Display Indicator ID-2150/ASM-612 in nose wheelwell (A1-F18AC-LMM-000).

- i. Operate engines (A1-F18AC-LMM-000).

- j. Make sure 658 failure code does not appear on Digital Display Indicator ID-2150/ASM-612 in nose wheelwell (A1-F18AC-LMM-000).

- k. Shut down engines (A1-F18AC-LMM-000).

- l. Close door 53L (A1-F18AC-LMM-010).

7. RIGHT FUEL FEED LINE TEMPERATURE SENSOR.**Support Equipment Required**

Nomenclature	Part Number or Type Designation
Torque Wrench, 0 to 200 Inch-Pounds	-

Materials Required

Nomenclature	Specification or Part Number
Packing	M25988/1-904
Petrolatum, Technical	VV-P-236 (CAGE 81348)
Tubing, Plastic	500024-1 (CAGE 13577)

8. REMOVAL.

- a. Remove right motive flow/boost pump (WP138 00).

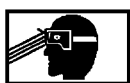
- b. Remove attaching parts from clamps (7, 9, 10, and 11, figure 3, details C, D, E, and F, figure 3).

- c. Disconnect sensor (1, detail B) connector from connector (3).

- d. Remove sensor (1, detail A) from crossfeed manifold.

9. INSTALLATION.

- a. Prepare mating surfaces of sensor (1, figure 3, detail A) and crossfeed manifold for electrical bonding (A1-F18AC-LMM-000).



Petrolatum

1

b. Lubricate packing (2) with petrolatum and install on sensor (1).

NOTE

Sensor may appear to be completely tightened when self-locking part of threads contact crossfeed manifold.

c. Install sensor (1), making sure sensor is completely tightened in crossfeed manifold. Torque sensor 100 to 130 inch-pounds. (QA)

d. Install clamps (7, 8, 9, 10, and 11, details C, D, E, and F) and attaching parts.

e. Connect sensor (1, detail B) connector to connector (3).

f. Install plastic tubing (details B and C) on sensor cable from connector to first clamp.

g. Install right motive flow/boost pump (WP138 00).

h. Do fuel leak test (A1-F18AC-LMM-000).

i. Reset Digital Display Indicator ID-2150/ASM-612 in nose wheelwell (A1-F18AC-LMM-000).

j. Operate engines (A1-F18AC-LMM-000).

k. Make sure 674 failure code does not appear on Digital Display Indicator ID-2150/ASM-612 in nose wheelwell (A1-F18AC-LMM-000).

l. Shut down engines (A1-F18AC-LMM-000).

m. Close door 53R (A1-F18AC-LMM-010).

10. ILLUSTRATED PARTS BREAKDOWN.

11. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

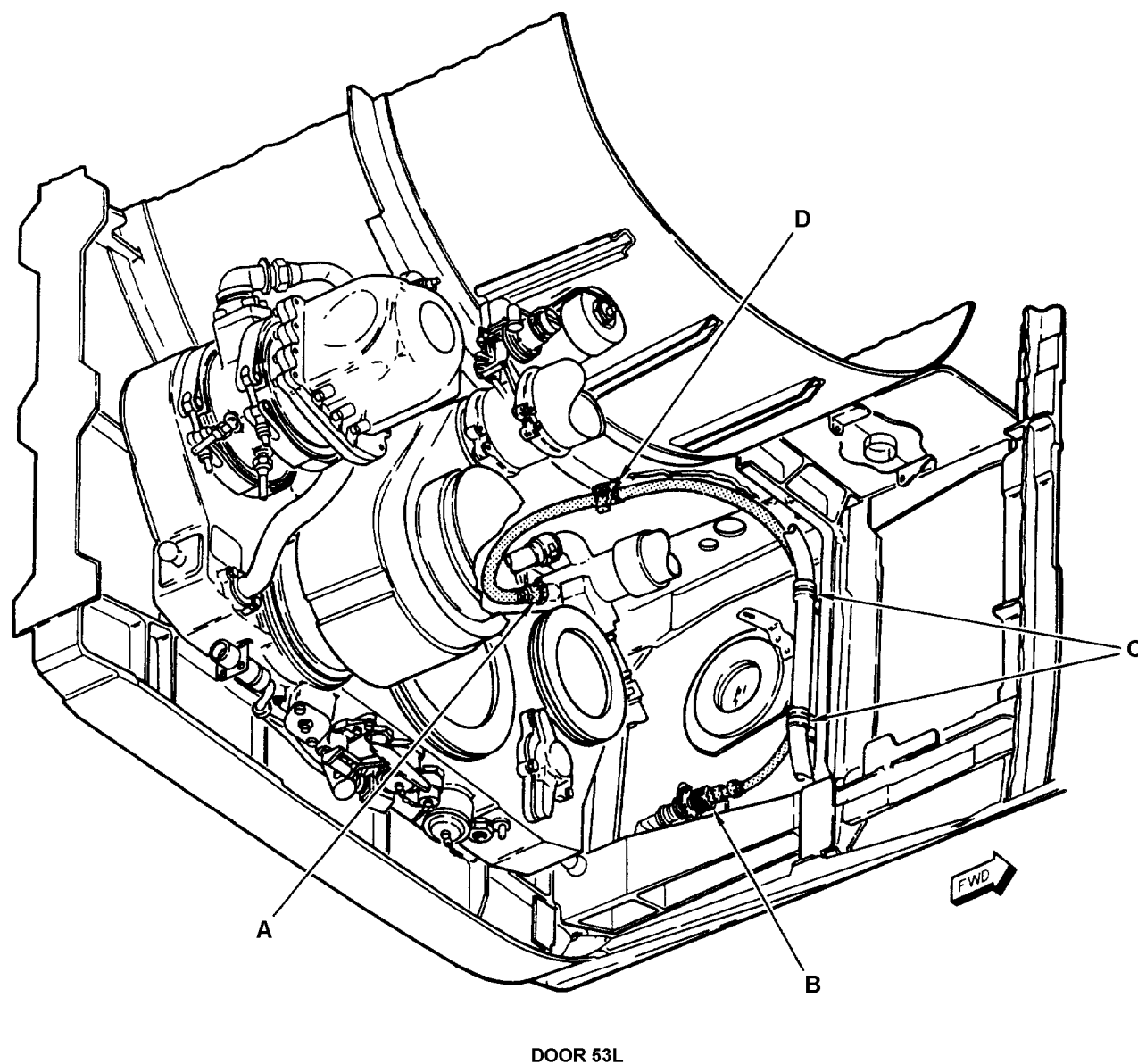


Figure 1. Left Fuel Feed Line Temperature Sensor (5A-P111) 161353
THRU 161741 (Sheet 1)

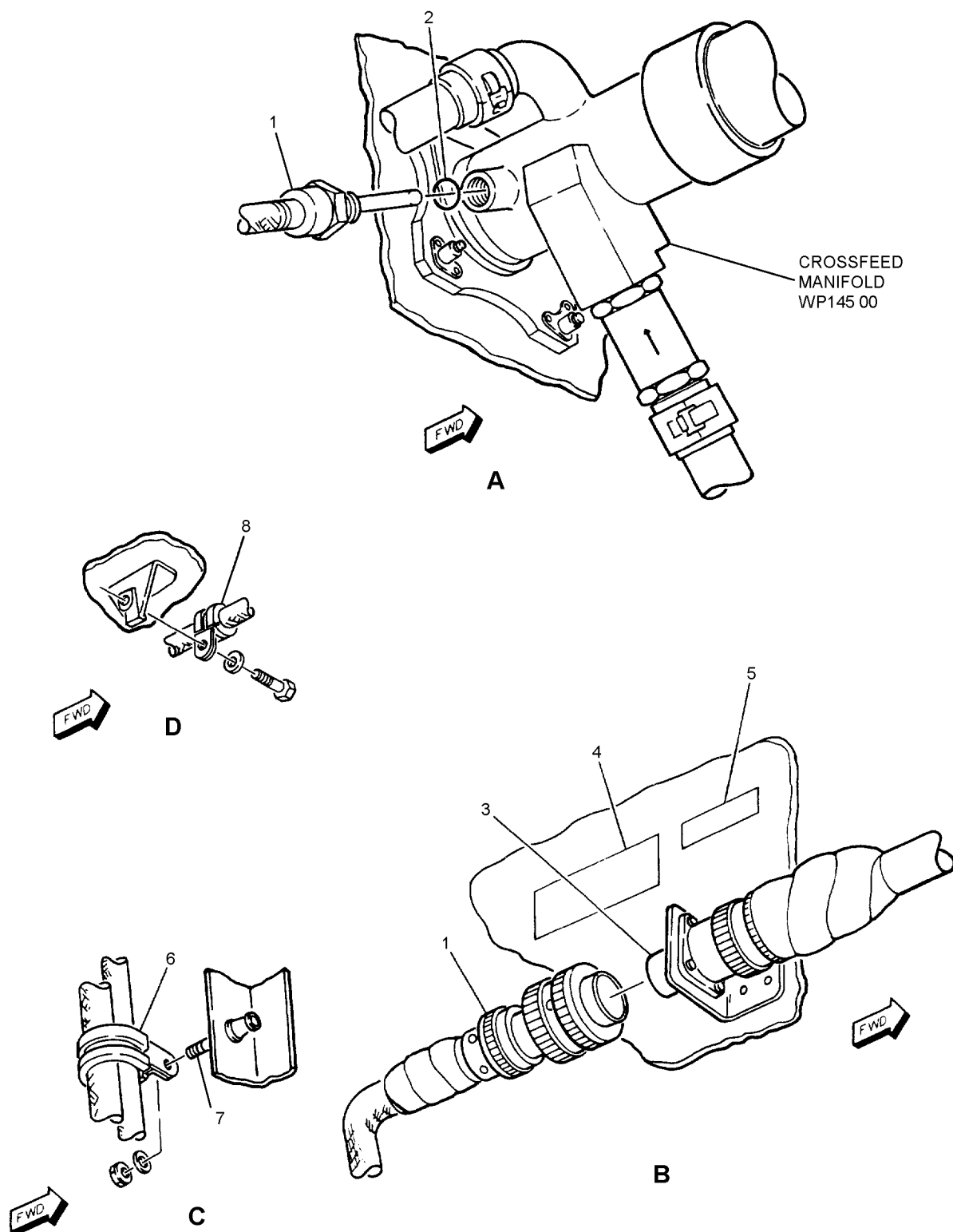


Figure 1. Left Fuel Feed Line Temperature Sensor (5A-P111) 161353
THRU 161741 (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		LEFT FUEL FEED LINE TEMPERATURE									
		SENSOR (5A-P111) 161353 THRU									
		161741									
1	184M	.	SENSOR, TEMPERATURE - FUEL FEEDLINE						1		PAOZZ
			(FUEL FEED LINE TEMPERATURE								
			SENSOR) (04274) (MCDONNELL SPEC								
			74-580144-105) (5A-P111)								
2	M25988/1-904	.	PACKING						1		PAOZZ
3	MS27656T9B98S	.	CONNECTOR, RECEPTACLE (5J-P111)						1		PAOZZ
4	74A885621-2582	.	MARKER, IDENTIFICATION - AVIONICS						1		MDOZZ
			(76301)								
5	74A885621-2212	.	MARKER, IDENTIFICATION - AVIONICS						1		MGOZZ
			(76031)								
6	JM44LC44WD10	.	CLAMP, LOOP (22175) (MCDONNELL SPEC						2	*	PAOZZ
			ST9M630D10)								
	830WD10G	.	SEE ABOVE (83930)						1	*	PAOZZ
	NAS1291C3M	.	NUT (AP)						1		PAOZZ
	AN960JD10L	.	WASHER (AP)						1		PAOZZ
7	HL146-6-2-1	.	STUD, SHOULDERED (73197) (MCDONNELL						1	*	PAOZZ
			SPEC 3M917-3-2-1)								
	AIC-L-146-3-2-1	.	SEE ABOVE (06725)						1	*	PAOZZ
	HL570-8MC	.	COLLAR, PIN RIVET, THREADED (73197)						1		PAOZZ
			(AP) (MCDONNELL SPEC ST3M525N3ME)								
8	MS21919WDG4	.	CLAMP						1		PAOZZ
	NAS673V3	.	BOLT (AP)						1		PAOZZ
	AN960JD10L	.	WASHER (AP)						1		PAOZZ
	A11144-7-3	.	NUT, CLIP (AP) (72962) (MCDONNELL SPEC						1	*	PAOZZ
			ST3M523C3M)								
	130091	.	NUT, CLIP (AP) (76530) (MCDONNELL SPEC						1	*	PAOZZ
			ST3M523C3M)								

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

**Figure 1. Left Fuel Feed Line Temperature Sensor (5A-P111) 161353
THRU 161741 (Sheet 3)**

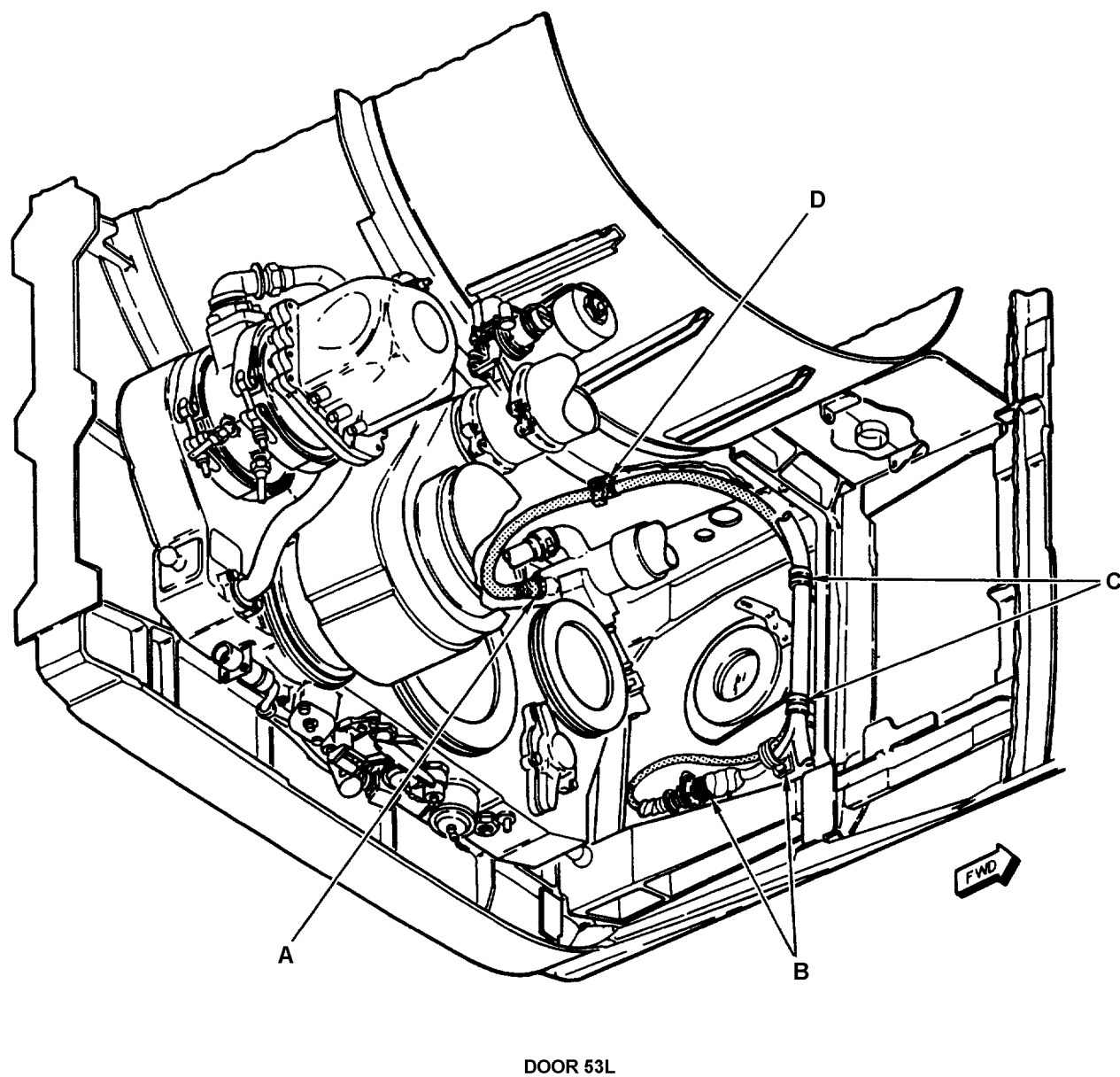


Figure 2. Left Fuel Feed Line Temperature Sensor (5A-P111)
161742 and Up (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		LEFT FUEL FEED LINE TEMPERATURE SENSOR									
		(5A-P111) 161742 AND UP									
1	184M	.						SENSOR, TEMPERATURE - FUEL FEEDLINE	1		PAOZZ
								(FUEL FEED LINE TEMPERATURE SENSOR)			
								(04274) (MCDONNELL SPEC 74-580144-105)			
								(5A-P111)			
2	M25988/1-904	.						PACKING	1		PAOZZ
3	MS21919WDG5	.						CLAMP	1		PAOZZ
	NAS673V3	.						BOLT (AP)	1		PAOZZ
	AN960JD10L	.						WASHER (AP)	1		PAOZZ
4	74A885621-2582	.						MARKER, IDENTIFICATION - AVIONICS	1		MDOZZ
								(76301)			
5	74A885621-2212	.						MARKER, IDENTIFICATION - AVIONICS	1		MGOZZ
								(76301) (5J-P111)			
6	MS27656T9B98S	.						CONNECTOR, RECEPTACLE (5J-P111)	1		PAOZZ
7	MS21919WDG3	.						CLAMP	2		PAOZZ
	NAS673V3	.						BOLT (AP)	1		PAOZZ
	AN960JD10L	.						WASHER (AP)	1		PAOZZ
	A11144-7-3	.						NUT, CLIP (AP) (72962) (MCDONNELL SPEC	1	*	PAOZZ
								ST3M523C3M) (USE WITH INDEX 7)			
	130091	.						SEE ABOVE (76530)		*	PAOZZ
8	MS21919WDG3	.						CLAMP	1		PAOZZ
	NAS673V3	.						BOLT (AP)	1		PAOZZ
	AN960JD10L	.						WASHER (AP)	1		PAOZZ
	A11144-7-3	.						NUT, CLIP (AP) (72962) (MCDONNELL SPEC	1	*	PAOZZ
								ST3M523C3M)			
	130091	.						SEE ABOVE (76530)	1	*	PAOZZ
* ALTERNATE OR EQUIVALENT PARTS. (WP002 00)											

**Figure 2. Left Fuel Feed Line Temperature Sensor (5A-P111)
161742 and Up (Sheet 3)**

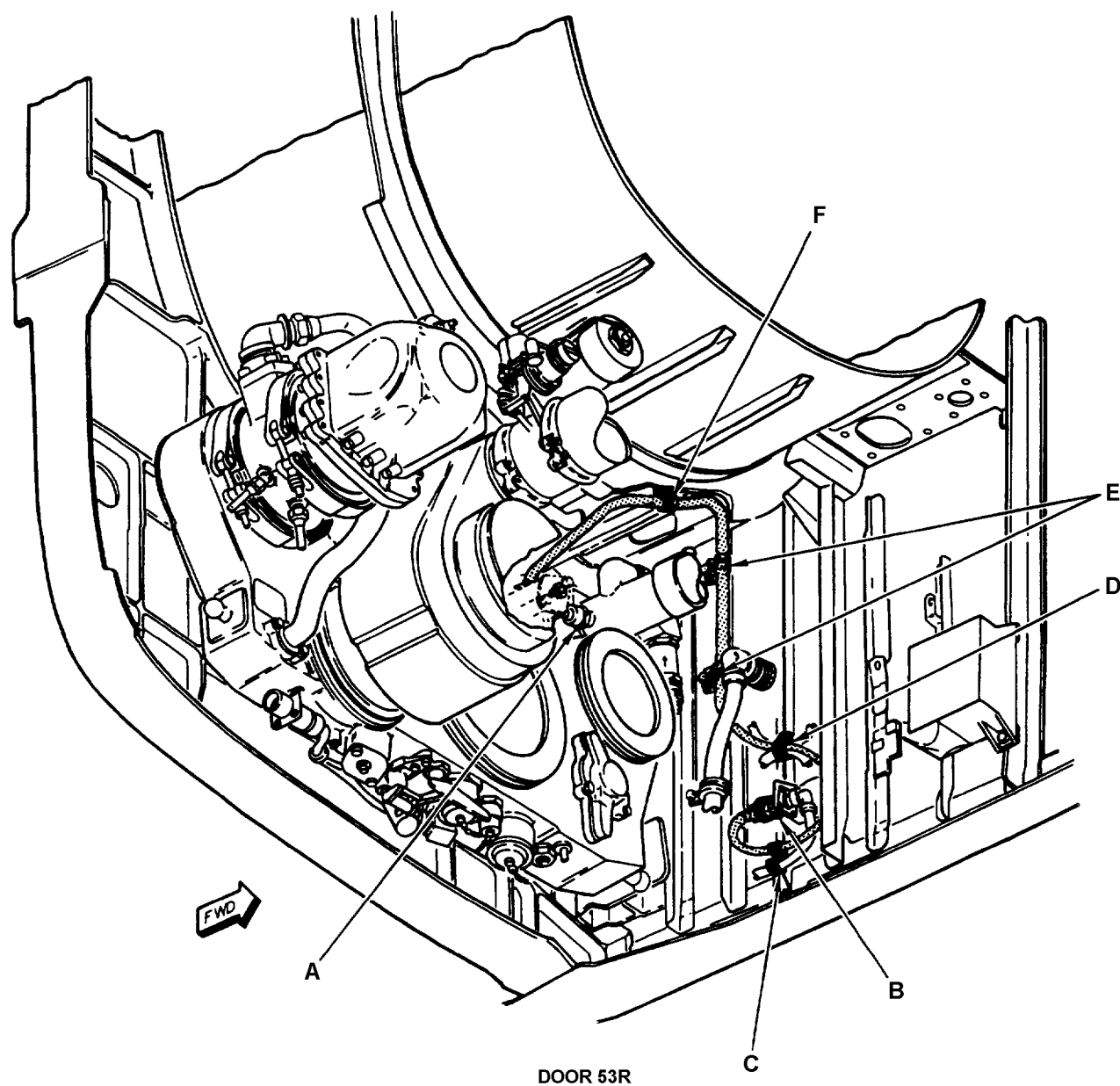


Figure 3. Right Fuel Feed Line Temperature Sensor (5A-R112) (Sheet 1)

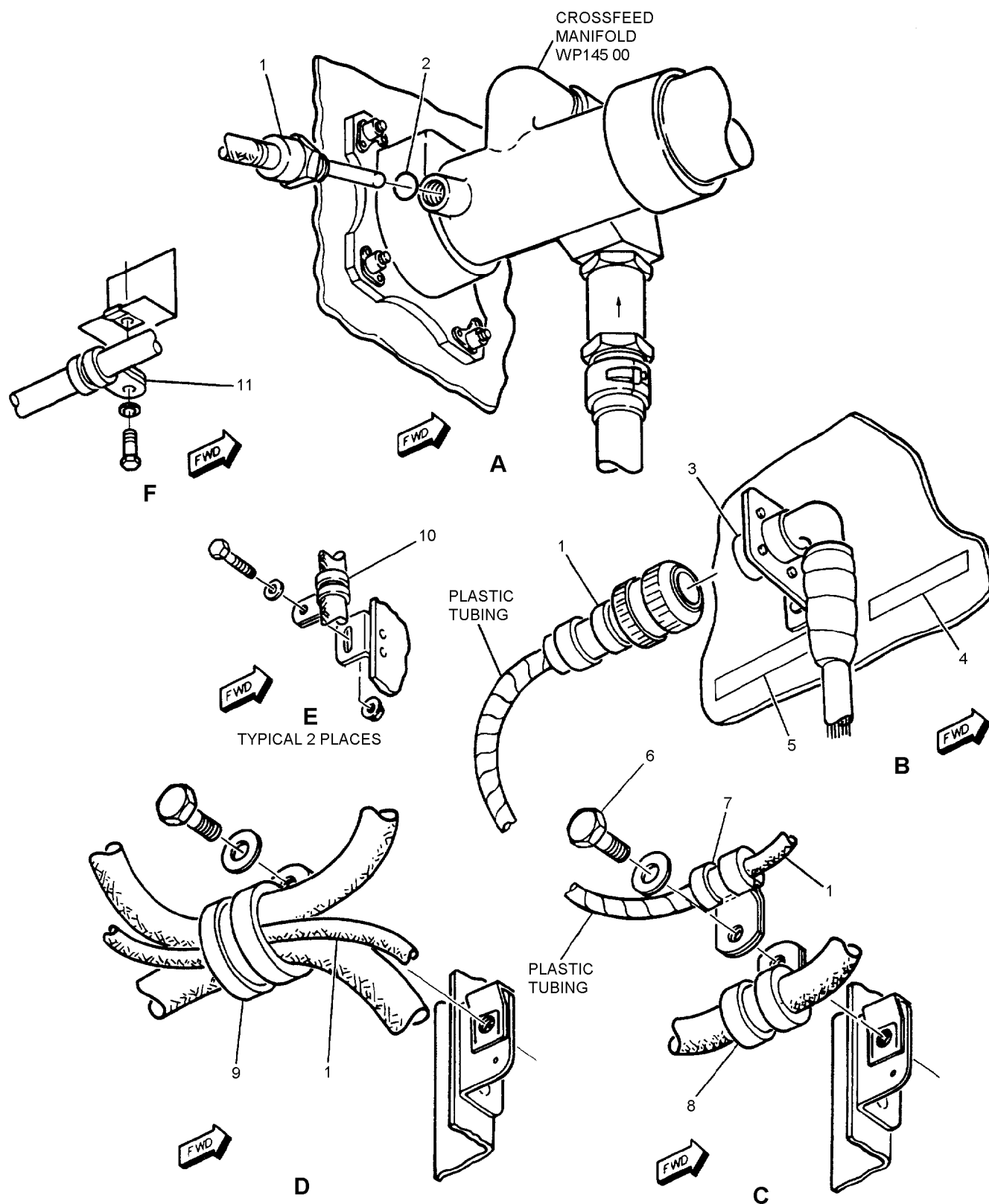


Figure 3. Right Fuel Feed Line Temperature Sensor (5A-R112) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		RIGHT FUEL FEED LINE TEMPERATURE			
		SENSOR (5A-R112)			
1	184M	. SENSOR, TEMPERATURE - FUEL FEEDLINE	1		PAOZZ
		(FUEL FEED LINE TEMPERATURE SENSOR) (04274) (MCDONNELL SPEC 74-580144-105) (5A-R112)			
2	M25988/1-904	. PACKING	1		PAOZZ
3	MS27656T9B98S	. CONNECTOR, RECEPTACLE (SJ-R112)	1		PAOZZ
4	74A885621-2460	. MARKER, IDENTIFICATION - AVIONICS	1		MGOZZ
		(76301)			
5	74A885621-2583	. MARKER, IDENTIFICATION - AVIONICS	1		MGOZZ
		(76301)			
6	NAS673V2	. BOLT	1		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 6)	1		PAOZZ
	A11144-7-3	. NUT, CLIP (72962) (MCDONNELL SPEC	1	*	PAOZZ
		ST3M523C3M) (USE WITH INDEX 6)			
	130091	. NUT, CLIP (76530) (MCDONNELL SPEC	1	*	PAOZZ
		ST3M523C3M) (USE WITH INDEX 6)			
7	MS21919WDG3	. CLAMP	1		PAOZZ
8	MS21919WDG6	. CLAMP	1		PAOZZ
9	JM44LC44WD8	. CLAMP, LOOP (22175) (MCDONNELL SPEC	1	*	PAOZZ
		ST9M630D8)			
	830WD8G	. SEE ABOVE (83930)	1	*	PAOZZ
	NAS673V3	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
	A11144-7-3	. NUT, CLIP (72962) (MCDONNELL SPEC	1	*	PAOZZ
		ST3M523C3M) (USE WITH INDEX 9)			
	130091	. SEE ABOVE (76530)	1	*	PAOZZ
10	MS21919WDG4	. CLAMP	2		PAOZZ
	NAS673V3	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
	NAS1291C3M	. NUT (AP)	1		PAOZZ
11	MS21919WDG4	. CLAMP	1		PAOZZ
	NAS673V3	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
	A11144-7-3	. NUT, CLIP (72962) (MCDONNELL SPEC	1	*	PAOZZ
		ST3M523C3M) (USE WITH INDEX 11)			
	130091	. SEE ABOVE (76530)	1	*	PAOZZ
		* ALTERNATE OR EQUIVALENT PARTS. (WP002 00)			

Figure 3. Right Fuel Feed Line Temperature Sensor (5A-R112) (Sheet 3)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****MOTIVE FLOW/BOOST PUMP (5BAT514 OR 5BAS515)****ENGINE FUEL SUPPLY SYSTEM**

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel/Oil Heat Exchanger Check Valve and Crossfeed Manifold	WP145 00
Electrical System	A1-F18AC-420-300
Generator Converter Unit	WP003 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Secondary Power System	A1-F18AC-240-300
AMAD	WP020 00
Fuel/Oil Heat Exchanger	WP022 00
Air Turbine Starter	WP025 00

Alphabetical Index

Subject	Page No.
Illustrated Parts Breakdown	5
Installation	3
Removal	2

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 43	30 Sep 86	Replacement of 7M404/7M550 Fuel Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 86	-
F/A-18 IAFC 056	27 Mar 85	Fuel System Components Replacement and System Inspection (ECP MDA-F/A-18-00158R1 AND ECP MDA-F/A-18-00160)	15 Jul 85	-

Record of Applicable Technical Directives (Cont)

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 IAFC 056 Amend 2	14 Oct 86	Fuel System Components Replacement and System Inspection: Cancellation of Change (Purpose: to Effect Cancellation of Refs A and B) (ECP MDA-F/A-18-00158R1 AND ECP MDA-F/A-18-00160)	1 Apr 88	-
F/A-18 AFC 70	-	Motive Flow Fuel Boost Pump Pressure Switch, Installation of (ECP MDA-F/A-18-0015R28 AND ECP MDA-F/A-18-00160)	15 Jul 86	-
F/A-18 IAFC 100	-	Right Hand AMAD Bay Motive Flow Tube Interference, Modification of (ECP MDA-F/A-18-00267)	1 Apr 88	-

Support Equipment Required

Nomenclature	Part Number or Type Designation
--------------	------------------------------------

Torque Wrench, 0 to 120 Inch-Pounds	-
---	---

d. On no. 5 circuit breaker panel assembly (figure 1, sheet 1), open F EXT circuit breaker.

e. Close left and right engine fuel shutoff valve per substeps below:

(1) Apply battery power (A1-F18AC-LMM-000).

(2) On LH and RH advisory and threat warning indicator panel, push L and R engine FIRE warning light.

(3) Remove battery power (A1-F18AC-LMM-000).

(4) On no. 5 circuit breaker panel assembly, open L and R FUEL S/O VALVE circuit breakers.

(5) In MLG wheelwell, visually inspect to make sure engine fuel shutoff valve manual override arm is in the CLOSED (-) position (figure 1, sheet 2).

f. Open door 53L or 53R (A1-F18AC-LMM-010).

g. If motive flow/boost pump (6, sheet 3) is replaced because of internal failure resulting in contamination of the lubrication system, replace:

(1) AMAD (A1-F18AC-240-300, WP020 00).

(2) Air Turbine Starter (A1-F18AC-240-300, WP025 00).

(3) Generator Converter Unit (A1-F18AC-420-300, WP003 00).

(4) Fuel/Oil Heat Exchanger (A1-F18AC-240-300, WP022 00).

Materials Required

Nomenclature	Specification or Part Number
--------------	---------------------------------

Lockwire	MS20995NC32 (CAGE 96906)
Packing	M25988/1-210
Packing (7)	M25988/1-226
Packing (4)	M25988/1-230
Packing	M25988/1-241
Packing	M25988/1-904
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).

b. Tag aircraft external power receptacle with an applicable warning to indicate external power is not to be applied to the aircraft.

c. Open door 10R (A1-F18AC-LMM-010).

h. Remove generator converter unit (A1-F18AC-420-300, WP003 00).

i. On left side, position an approved safety container below tubes (4 and 8, sheet 3) to catch residual fuel when removing cap (12) and tubes (4 and 8).

j. On right side, position an approved safety container below tubes (26 and 27, sheet 5) to catch residual fuel when removing cap (12) and tubes (26 and 27).



Jet Fuel

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WARNING

To prevent personal injury, do not stand directly under cap when draining residual fuel or removing tubes.

k. Rotate left or right tube (8 or 27) away from structure, remove cap (12), and drain residual fuel. Install cap (12) when fuel is drained and safety cap with lockwire, if safetying holes in tube (8 or 27, sheets 3 and 5) exist. (QA)

l. Remove couplings (7, sheet 3 or 5) (WP013 00) and remove packings (9) and tube (8).

m. On left side, remove couplings (3 and 5, sheet 3) (WP013 00).

n. On left side, carefully unseat tube (4) and drain residual fuel. Remove tube (4) and packings (2).

o. On right side, remove couplings (5, sheet 5) (WP013 00).

p. On right side, carefully unseat tube (26) and drain residual fuel. Remove tube (26) and packings (2).

q. On 163119 AND UP; ALSO 161353 THRU 161924 BEFORE F/A-18 IAFC 056 OR 161353 THRU 163118 AFTER F/A-18 AFC 70 disconnect connector (14, sheet 4 or 6).

r. Disconnect tube (21 or 33, sheet 4 or 6).

s. Remove lockwire and disconnect coupling (20).

WARNING

To prevent personal injury, do not stand directly under pump and tube. Residual fuel is present in pump and tube.

t. Move pump (6) forward and remove with tube (17).

u. Remove coupling (7), (WP013 00) tube (17), and packings (9).

v. Remove packings (18 and 19) from pump (6).

w. Remove nipple (22) and packing (23) from pump (6).

x. On 163119 AND UP; ALSO 161353 THRU 161924 BEFORE F/A-18 IAFC 056 OR 161353 THRU 163118 AFTER F/A-18 AFC 70, do substeps below:

(1) On left side remove switch (15, sheet 4) and packing (16).

(2) On right side remove switch (15, sheet 6), elbow (29), nut (30), retainer (31) and packing (32).

y. On 161353 THRU 161924 AFTER F/A-18 IAFC 056 AND BEFORE F/A-18 AFC 70; ALSO 161925 THRU 163118 BEFORE F/A-18 AFC 70, remove plug (24, sheet 4 or 6).

CAUTION

To prevent damage to pump, cover ports and mounting flange with suitable protective material and tape.

z. Cover all ports and mounting flange with suitable protective material and tape.

2. INSTALLATION.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).



Petrolatum

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- b. Lubricate new packings with petrolatum.
- c. Remove covers from openings.

NOTE

Pump impeller may have grinding marks which results from material removed for balancing impeller. This is normal for all pumps and should not be interpreted as a defective pump.

d. Inspect pump (6, figure 1, sheet 4 or 6) drive spline and AMAD drive spline for cracks, dents, chips, or corrosion.

e. On 163119 AND UP; ALSO 161353 THRU 161924 BEFORE F/A-18 IAFC 056 OR 161353 THRU 163118 AFTER F/A-18 AFC 70, do substeps below:

(1) On left side, install packing (16, sheet 4) and switch (15) on pump (6). Safety switch (15) with lockwire. (QA)

(2) On right side install nut (30, sheet 6), retainer (31), packing (32), elbow (29), and switch (15) on pump (6). Safety switch (15) with lockwire. (QA)

f. On 161353 THRU 161924 AFTER F/A-18 IAFC 056 AND BEFORE F/A-18 IAFC 70; ALSO 16925 THRU 163118 BEFORE F/A-18 AFC 70, do substeps below:

(1) On left side install packing (16, sheet 4) and plug (24) on pump (6). Safety plug (24) with lockwire. (QA)

(2) On right side install packing (32, sheet 6) and plug (24) on pump (6). Safety plug (24) with lockwire. (QA)

g. Install packing (23, sheet 4 or 6) and nipple (22) on pump (6).

h. Install packings (9, 18, and 19) on pump (6) and tube (17).

WARNING

To prevent a possible fire and/or explosion, make sure corrosion resistant steel couplings are used in high heat areas (AMAD and engine bays). Both the outer clamp and inner sleeve will have a silver grey color.

i. Position adapter (17) on pump (6). Inspect, install, and lockwire coupling (7) (WP013 00). (QA)

CAUTION

To prevent damage to equipment, AMAD drive spline and motive flow/boost pump spline must mesh smoothly and tube must be aligned with crossfeed manifold (WP145 00).

j. Align pump (6) drive spline to mesh smoothly with AMAD drive spline.

k. Make sure tube (17) is aligned in crossfeed manifold (WP145 00).

l. Install pump (6) by pushing aft and inspect and install coupling (20). Torque nut on coupling (20) 45 to 55 inch-pounds and safety with lockwire. (Details B and E) (QA)

m. On 163119 AND UP; ALSO 161353 THRU 161924 BEFORE F/A-18 IAFC 056 OR 161353 THRU 163118 AFTER F/A-18 AFC 070, connect connector (14) to switch (15).

n. Connect tube (21 or 33) to nipple (22).

o. Install packings (2, sheet 3 or 5) on pump (6), tube (4 or 26) and tube (1 or 25).

CAUTION

To prevent damage to tube resulting in fuel leakage, tube must be aligned and installed correctly. Flow arrow on label left side tube may be incorrect.

p. Position tube (4) on flat surface as shown on (detail C) and with a marker, mark an arrow as shown.

q. On left side, install tube (4, sheet 3) with arrow pointing toward pump (6). Inspect, install, and lockwire coupling (3), then coupling (5) (WP013 00). (QA)

r. On right side, install tube (26, sheet 5) and inspect, install and lockwire couplings (5) (WP013 00). (QA)

s. Install packings (9, sheets 3 and 5) on pump (6), tube (13 or 28), and tube (8 or 27).

WARNING

To prevent tubing interference, resulting in possible fuel leaks, tube 74A587010 (21A) must be installed on right side only.

CAUTION

To prevent damage of tubes next to tube (8 or 27) make sure cap (12) points down.

NOTE

Tube (8) is installed only on the left side and some tubes have LEFT etched on their surfaces. Tube (27) is installed only on the right side and some tubes have RIGHT etched on their surfaces.

t. On left side, install tube (8, sheet 3) with cap (12) pointing down. Inspect, install, and lockwire couplings (7) (WP013 00). (QA)

u. On right side, install tube (27, sheet 5) with cap (12) pointing down. Inspect, install and lockwire couplings (7) (WP013 00). (QA)

v. Remove no power tag from external power receptacle.

w. Open left and right engine fuel shutoff valves per substeps below:

(1) In door 10R, on no. 5 circuit breaker panel assembly (sheet 1), close L and R FUEL S/O VALVE circuit breakers.

(2) Apply battery power (A1-F18AC-LMM-000).

(3) On LH and RH advisory and threat warning indicator panel, release L and R engine FIRE warning lights.

(4) Remove battery power (A1-F18AC-LMM-000).

x. On no. 5 circuit breaker panel assembly, close F EXT circuit breaker and close door 10R (A1-F18AC-LMM-010).

y. Install generator converter unit (A1-F18AC-420-300, WP003 00).

z. Do fuel leak test (A1-F18AC-LMM-000).

aa. Operate APU with applicable AMAD in ground maintenance mode (A1-F18AC-LMM-000).

ab. On 163119 AND UP; ALSO 161353 THRU 161924 BEFORE F/A-18 IAFC 056 OR 161353 THRU 163118 AFTER F/A-18 AFC 70, set up cockpit digital display indicator for display (A1-F18AC-LMM-000) and do substeps below:

(1) After left motive flow/boost pump installation, make sure L BOOST LO is off and R BOOST LO is on.

(2) After right motive flow/boost pump installation, make sure R BOOST LO is off and L BOOST LO is on.

ac. Inspect for fuel leaks in area of APU.

ad. Turn cockpit digital display indicator power switch OFF. Shut down APU (A1-F18AC-LMM-000).

ae. Close door 53L or 53R as applicable (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

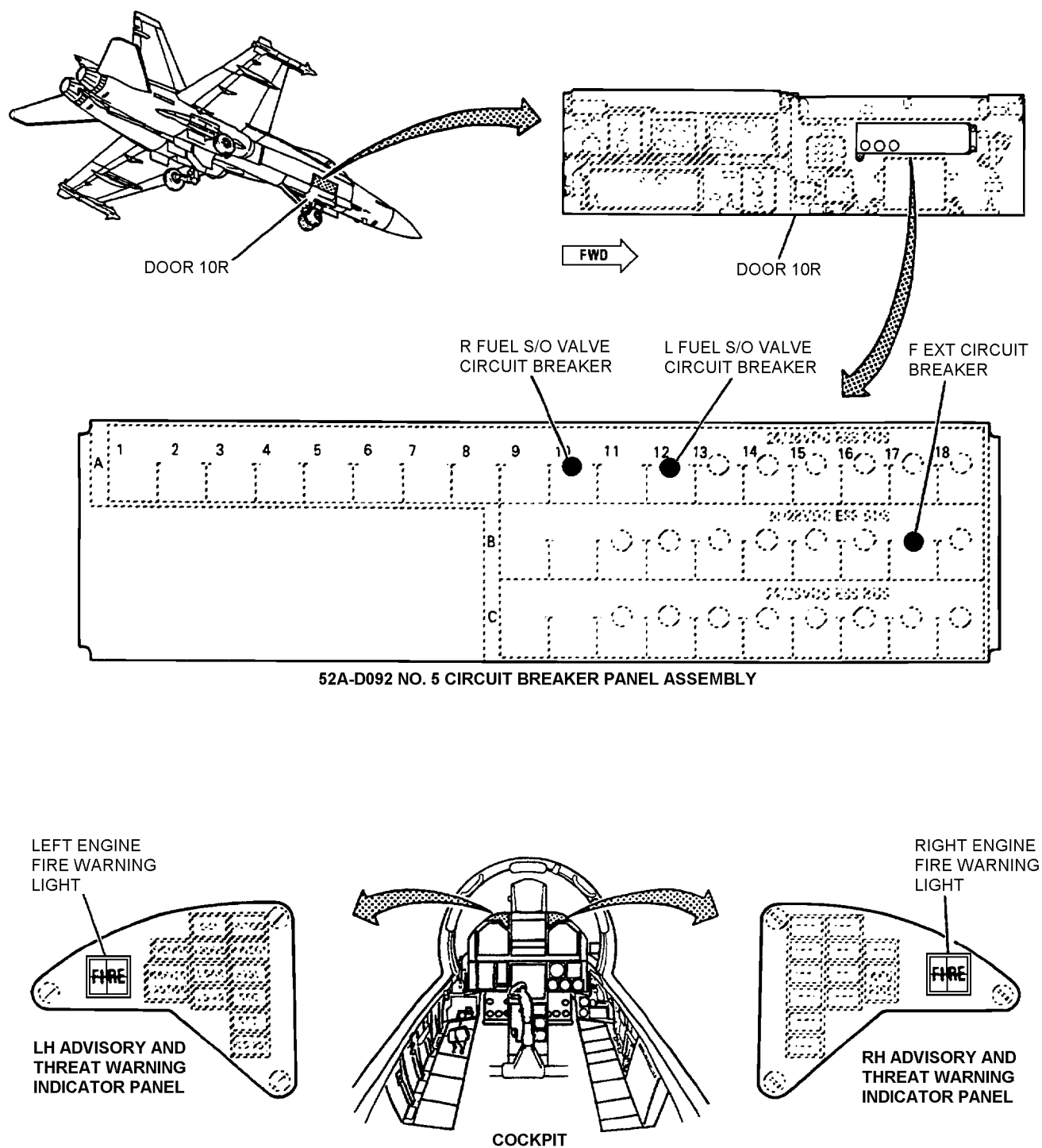


Figure 1. Motive Flow/Boost Pump (5BAT514 or 5BAS515) (Sheet 1)

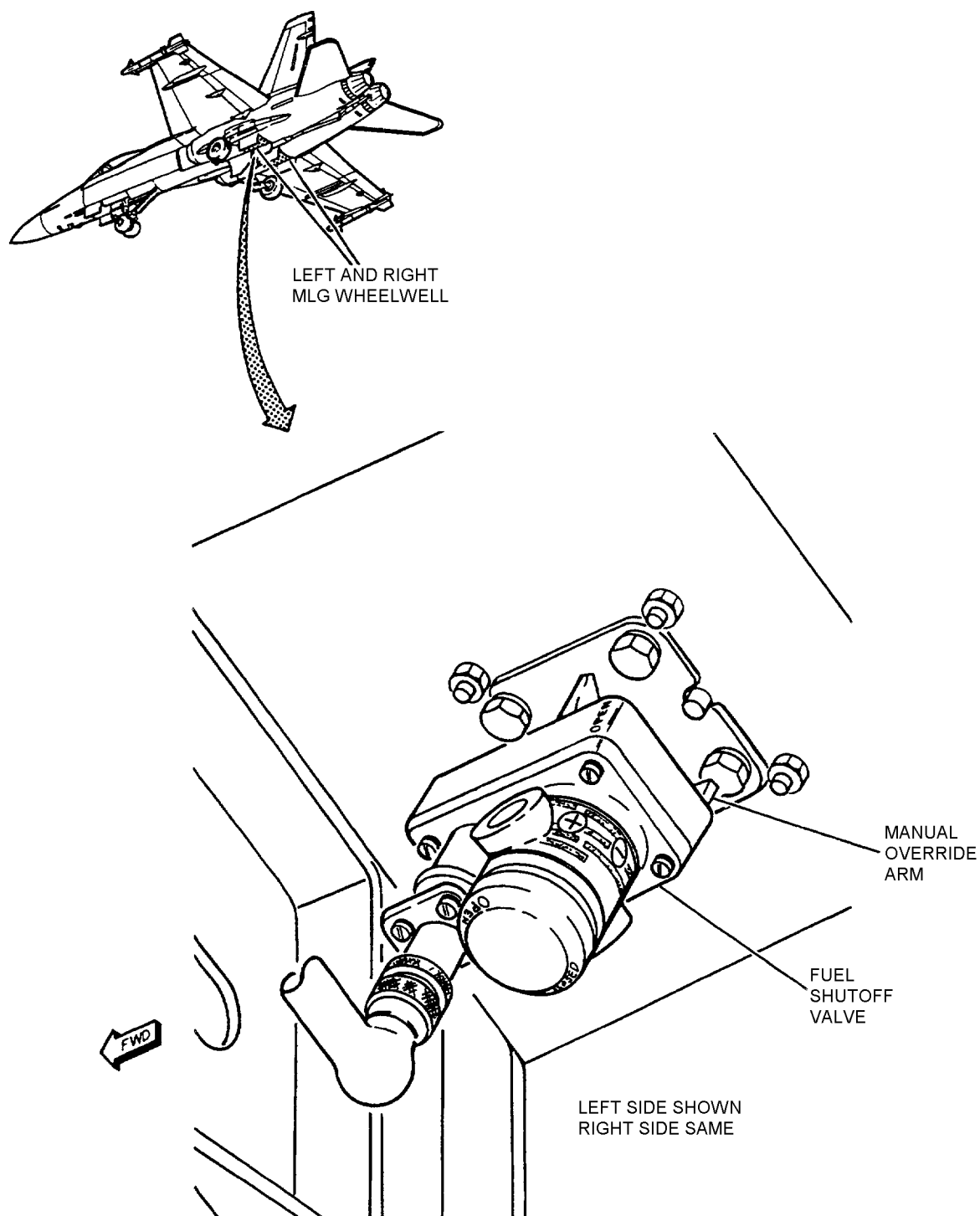


Figure 1. Motive Flow/Boost Pump (5BAT514 or 5BAS515) (Sheet 2)

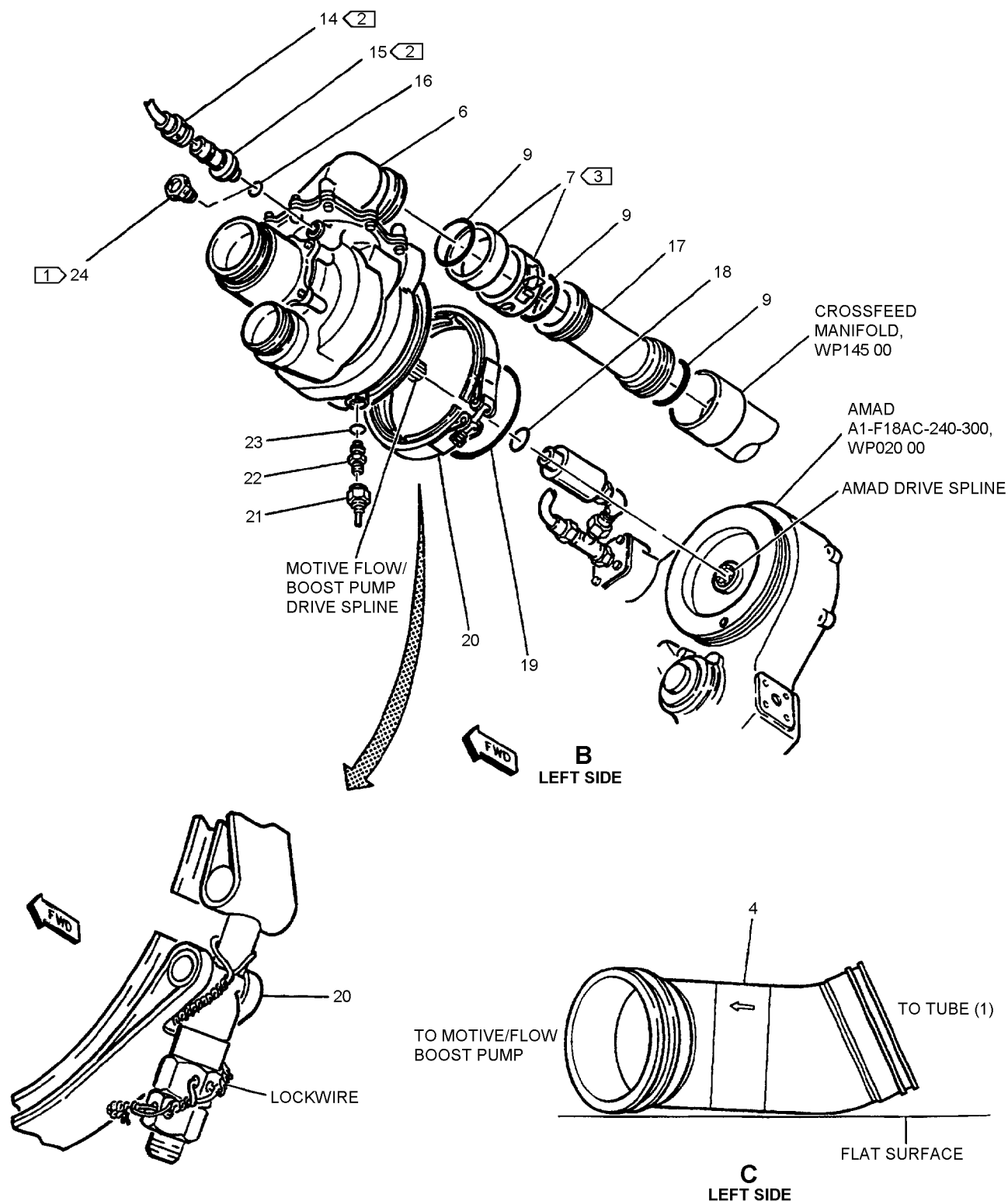


Figure 1. Motive Flow/Boost Pump (5BAT514 or 5BAS515) (Sheet 4)

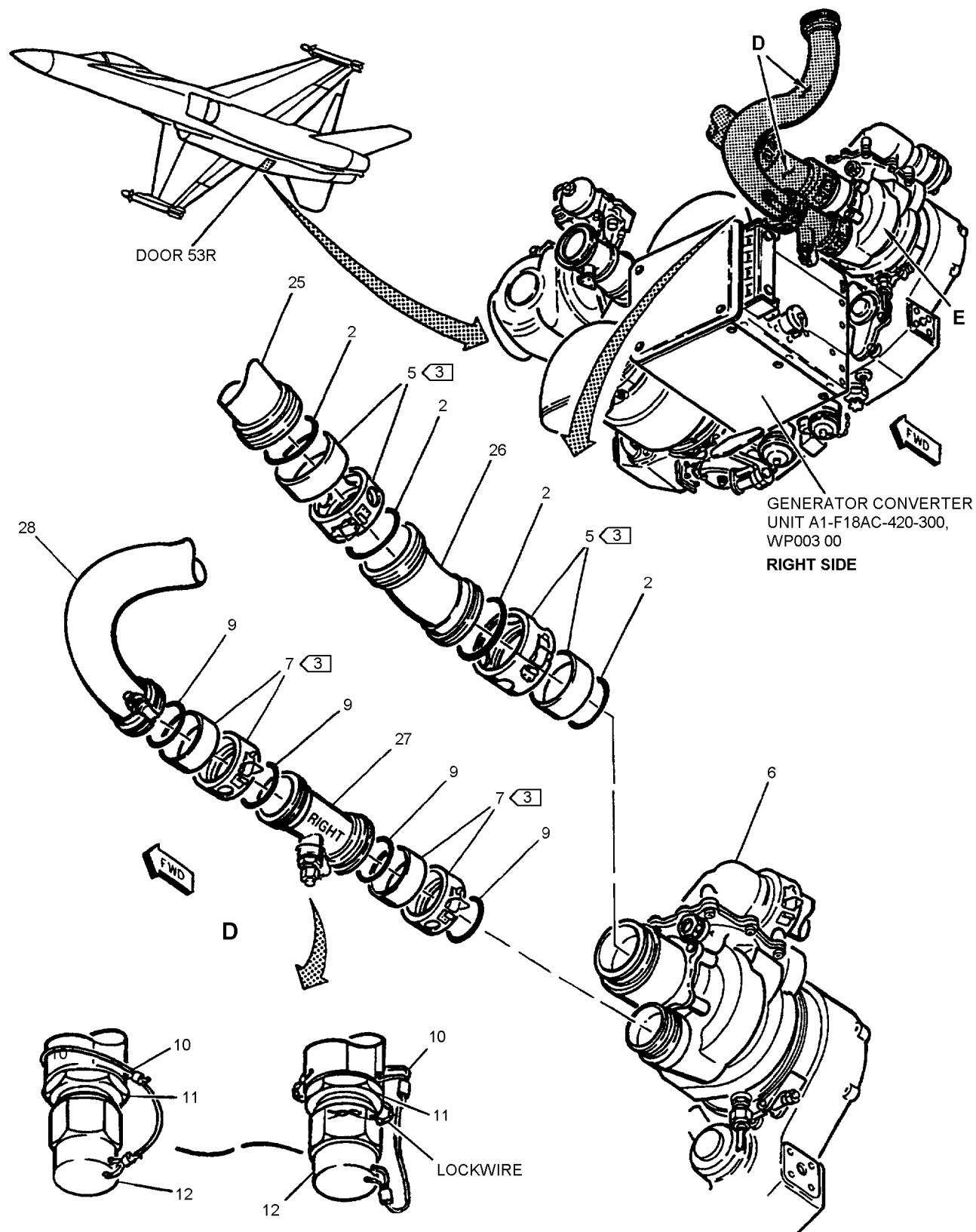


Figure 1. Motive Flow/Boost Pump (5BAT514 or 5BAS515) (Sheet 5)

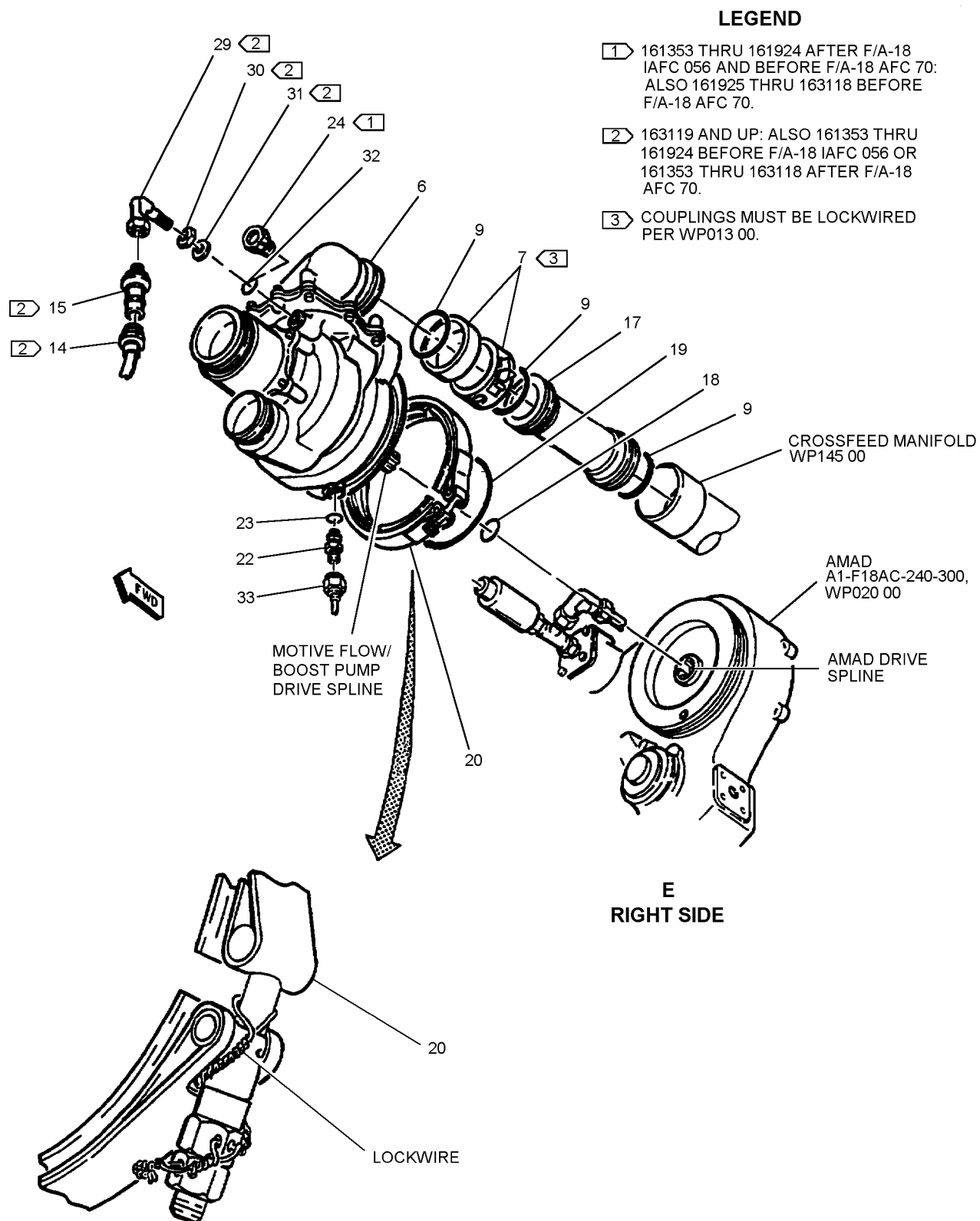


Figure 1. Motive Flow/Boost Pump (5BAT514 or 5BAS515) (Sheet 6)

INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USE ON CODE	SM&R CODE
		1 2 3 4 5 6 7			
		MOTIVE FLOW/BOOST PUMP (5BAT514 OR 5BAS515)			
1	74A586958-1003	. TUBE ASSY, METAL - FUEL SYSTEM Y531.5-Y536.60 (76301) (LEFT SIDE)	1		PAOZZ
2	M25988/1-230	. PACKING (LEFT SIDE)	3		PAOZZ
	M25988/1-230	. PACKING (RIGHT SIDE)	4		PAOZZ
3	W904K40CE	. COUPLING, CLAMP, GROOVED (HALF) (79326) (MCDONNELL SPEC 7M765-40C-1) (LEFT SIDE)	1	D	PAOZZ
	14C12-40C	. COUPLING, CLAMP, GROOVED (HALF) (24984) (MCDONNELL SPEC 7M765-40C-1) (LEFT SIDE)	1	D	PAOZZ
	W904E40CE	. SEE ABOVE (79326) (MCDONNELL SPEC 7M550-40C-1)	1	E	PAOZZ
4	74A586959-1005	. TUBE ASSY, METAL - FUEL SYSTEM, Y536.6 - Y542.94 (76301) (LEFT SIDE) (REPLACES 4A586959-1003)	1		PAOZZ
	74A586959-1003	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	S	PAOZZ
5	W901K40CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-40C) (INCLUDES SLEEVE) (LEFT SIDE)	1	D	PAOZZ
	14J12-40C	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-40C) (INCLUDES SLEEVE) (LEFT SIDE)	1	D	PAOZZ
	W901F40CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-40C) (INCLUDES SLEEVE) (LEFT SIDE)	1	E	PAOZZ
	W901K40CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-40C) (INCLUDES SLEEVE) (RIGHT SIDE)	2	D	PAOZZ
	14J12-40C	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-40C) (INCLUDES SLEEVE) (RIGHT SIDE)	2	D	PAOZZ
	W901F40CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-40C) (INCLUDES SLEEVE) (RIGHT SIDE)	2	E	PAOZZ
6	5004220G	. PUMP, FUEL, JET ENGINE - MOTIVE FLOW/BOOST (MOTIVE FLOW/BOOST PUMP) (99167) (MCDONNELL SPEC 74-580101-103) (5BAT514 OR 5BAS515) (REPLACES 5004220F)	1		PAODD
	5004220F	. PUMP, FUEL, JET ENGINE - MOTIVE FLOW/BOOST (MOTIVE FLOW/BOOST PUMP) (99167) (MCDONNELL SPEC 74-580101-101) (5BAT514 OR 5BAS515) (USE UNTIL EXHAUSTED)	1	L	PAODD
7	W901K32CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M76S-32C) (INCLUDES SLEEVE)	3	D	PAOZZ
	14J12-32C	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-32C) (INCLUDES SLEEVE)	3	D	PAOZZ
	W901F32CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-32C) (INCLUDES SLEEVE)	3	E	PAOZZ
8	74A586991-1007	. TUBE ASSY, METAL - FUEL, MAIN MOTIVE FLOW BOOST, (LH) (76301) (REPLACES 74A586991-1005)	1		PAOZZ
	74A586991-1005	. TUBE ASSY, METAL - FUEL, MAIN MOTIVE FLOW BOOST, (LH) (76301) (USE UNTIL EXHAUSTED)	1	R	PAOZZ

Figure 1. Motive Flow/Boost Pump (5BAT514 or 5BAS515) (Sheet 7)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
9	M25988/1-226	.	PACKING	.....					7		PAOZZ
10	9M59-2-140P +	.	WIRE ROPE ASSEMBLY (76301)	.....					1		MGOZZ
	9M59-2-400P + +	.	WIRE ROPE ASSEMBLY (76301)	.....					1		MGOZZ
	51893	.	SWAGING SLEEVE, WIRE (00779)	.....					2		PAOZZ
			(MCDONNELL SPEC 9M306-6)								
			(USE WITH INDEX 10)								
11	AN815-10J	.	NIPPLE	.....					1		PAOZZ
	M25988/1-910	.	PACKING (USE WITH INDEX 11)	.....					1		PAOZZ
12	74A587050-2001 c	.	CAP ASSEMBLY, DRAIN - TUBE, FUEL	.....					1		XBOZZ
			(76301)								
	AN929A10J	.	CAP (INCLUDES AN818L10J NUT)	.....					1	*	PAOZZ
13	74A586961-1009	.	TUBE ASSY, METAL - MAIN MOTIVE	.....					1		PAOGG
			FLOW BOOST, LH Y541.1 (76301)								
			(LEFT SIDE)								
	74A586961-1007	.	SEE ABOVE	.....					1	*	PAOGG
	74A586961-1003	.	SEE ABOVE	.....					1	*	PAOZZ
14	MS27467T11B98S	.	CONNECTOR, PLUG (5P-P113 OR 5P-R114)	.....					1	M	PAOZZ
15	211C117-180	.	SWITCH, PRESSURE - FUEL (FUEL BOOST	.....					1	P*	PAOZZ
			PRESSURE SWITCH) (02750)								
			(MCDONNELL SPEC 74-580167-119)								
			(5S-P113 OR 5S-R114)								
	2299-19	.	SEE ABOVE (55723)	.....					1	P*	PAOZZ
	12446-111	.	SEE ABOVE (98505) (MCDONNELL SPEC	.....					1	H	PAOZZ
			74-580167-111)								
	12446-105	.	SWITCH, PRESSURE - FUEL (FUEL BOOST	.....					1	A	PAOZZ
			PRESSURE SWITCH) (98505)								
			(MCDONNELL SPEC 74-580167-101)								
			(5S-P113 OR 5S-R114)								
16	M25988/1-904	.	PACKING	.....					1		PAOZZ
17	74A586956-1005	.	ADAPTER, FUEL PUMP TO TUBE ASSY (76301)	..					1		PAOZZ
18	M83248/1-210	.	PACKING (REPLACES M25988/1-210)	.....					1		PAOZZ
19	M83248/1-241	.	PACKING (REPLACES M25988/1-241)	.....					1		PAOZZ
20	MVT69892-1 @	.	COUPLING, CLAMP, GROOVED (98625)	.....					1	*	PAOZZ
			(MCDONNELL SPEC ST7M410-1)								
	VC1204-1 @	.	SEE ABOVE (14242)	.....					1	*	PAOZZ
21	74A541239-1001	.	TUBE ASSEMBLY, METAL - VENT	.....					1	B	PAOZZ
			Y552.005 (76301) (LEFT SIDE)								
	74A541239-1003	.	TUBE ASSEMBLY, METAL - VENT	.....					1	C	PAOZZ
			Y552.005 (76301) (LEFT SIDE)								
	74A541239-1005	.	TUBE ASSEMBLY, METAL - VENT	.....					1	G	PAOZZ
			Y552.005 (76301) (LEFT SIDE)								
22	7M637BD-4D	.	NIPPLE (76301)	.....					1		PAOZZ
23	M25988/1-904	.	PACKING	.....					2		PAOZZ
24	AN814-4JL	.	PLUG (LEFT AND RIGHT SIDE)	.....					2	N	PAOZZ
25	74A586990-1005	.	CONNECTOR, TUBE, BULKHEAD - MAIN	.....					1	F	PAOZZ
			ENGINE FEED R SIDE Y534 (76301)								
			(RIGHT SIDE)								
	74A586990-1007	.	CONNECTOR, TUBE, BULKHEAD - MAIN	.....					1	G	PAOZZ
			ENGINE FEED R SIDE Y534 (76301)								
26	74A586957-1003	.	TUBE ASSY, METAL - MAIN ENGINE FEED,	.....					1		PAOZZ
			R SIDE, Y537 (76301) (RIGHT SIDE)								
27	74A587010-1001	.	TUBE ASSY, METAL - FUEL MAIN MOTIVE	.....					1	Q	PAOZZ
			FLOW BOOST, RH (76301)								
	74A586991-1007	.	SEE ABOVE	.....					1	J	PAOZZ
	74A586991-1005	.	SEE ABOVE	.....					1	K	PAOZZ
28	74A586955-1011	.	TUBE ASSY, METAL - FUEL, MAIN MOTIVE	.....					1		PAOGG
			FL BOOST, Y541.1 (76301)								
			(RIGHT SIDE ONLY)								
	74A586955-1009	.	SEE ABOVE	.....					1	*	PAOGG

Figure 1. Motive Flow/Boost Pump (5BAT514 or 5BAS515) (Sheet 8)

INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USE ON CODE	SM&R CODE
		1 2 3 4 5 6 7			
	74A586955-1005	. SEE ABOVE		*	PAOGG
29	ST7M263J4	. ELBOW (76301) (RIGHT SIDE)	1	M	PAOZZ
30	AN6289J4	. NUT (RIGHT SIDE)	1	M	PAOZZ
31	MS28773-04	. RETAINER (RIGHT SIDE)	1	M	PAOZZ
32	M25988/1-904	. PACKING (RIGHT SIDE)	1		PAOZZ
33	74A541240-1001	. TUBE ASSEMBLY, METAL - VENT	1	B	PAOZZ
		Y551.118 (76301) (RIGHT SIDE ONLY)			
	74A541240-1003	. TUBE ASSEMBLY, METAL - VENT	1	C	PAOZZ
		Y551.118 (76301) (RIGHT SIDE ONLY)			
	74A541240-1005	. TUBE ASSEMBLY, METAL - VENT	1	G	PAOZZ
		Y551.118 (76301) (RIGHT SIDE ONLY)			

@ INCLUDES TWO NAS509-4C NUTS.

¢ MADE FROM AN929A10J.

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

+ USE WITH 74A586991-1005 TUBE.

+ + USE WITH 74A586991-1007 &
74A587010-1001 TUBES.

CODE	USABLE ON	MODEL
A	161353 THRU 161367 BEFORE F/A-18 IAFC 056 AND BEFORE F/A-18 AFC 70	F/A-18A/B
B	161353 THRU 161519	F/A-18A/B
C	161520 THRU 161741	F/A-18A/B
D	161924 & UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 43	F/A-18A/B
E	161353 THRU 161761 BEFORE F/A-18 AFC 43	F/A-18A/B
F	161353 THRU 161741	F/A-18A/B
G	161742 & UP	F/A-18A/B
H	161353 THRU 161924 BEFORE F/A-18 IAFC 056 AND BEFORE F/A-18 AFC 70	F/A-18A/B
J	161353 THRU 162907 BEFORE F/A-18 IAFC 100	F/A-18A/B
K	161353 THRU 161528 BEFORE F/A-18 IAFC 100	F/A-18A/B

Figure 1. Motive Flow/Boost Pump (5BAT514 or 5BAS515) (Sheet 9)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		L						161353 THRU 161924	F/A-18A/B		
		M						163119 & UP; ALSO 161353 THRU 161924 BEFORE F/A-18 IAFC 056 OR 161353 THRU 163118 AFTER F/A-18 AFC 70	F/A-18A/B		
		N						161353 THRU 161924 AFTER F/A-18 IAFC 056 AND BEFORE P/A-18 AFC 70; ALSO 161925 THRU 163118 BEFORE F/A-18 AFC 70	F/A-18A/B		
		P						163119 & UP; ALSO 161353 THRU 163118 AFTER F/A-18 AFC 70	F/A-18A/B		
		Q						162908 & UP; ALSO 161353 THRU 162907 AFTER F/A-18 IAFC 100	F/A-18A/B		
		R						161353 THRU 161528	F/A-18A/B		
		S						161353 THRU 162433	F/A-18A/B		

Figure 1. Motive Flow/Boost Pump (5BAT514 or 5BAS515) (Sheet 10)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
HEAT EXCHANGERS WASH FILTER (5FAP647 OR 5FAR648)
ENGINE FUEL SUPPLY SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tanks Maintenance Precautions and General Preparation	WP013 00
Electrical System	A1-F18AC-420-300
Generator Converter Unit	WP003 00
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer and Engine Fuel Supply System Test	WP012 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Manual	A1-F18AC-LMM-000
Secondary Power Control System	A1-F18AC-240-300
Air Turbine Starter and Turbine Starter Control Valve	WP025 00

Alphabetical Index

Subject	Page No.
Illustrated Parts Breakdown	4
Installation	3
Removal	2

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 21	-	Addition of Fuel/Air Heat Exchanger (ECP MDA-F/A-18-00033)	15 Jul 86	-
F/A-18 AFC 43	30 Sep 86	Replacement of 7M404/7M550 Fuel Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 86	-
F/A-18 IAFC 100	-	Right Hand AMAD Bay Motive Flow Tube Interference, Modification of MDA-F/A-18-00267)	1 Apr 88	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC32 (CAGE 96906)
Packing	M29588/1-015
Packing (6)	M29588/1-226
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).

b. Tag aircraft external power receptacle with an applicable warning to indicate external power is not to be applied to the aircraft.

c. Open door 10R (A1-F18AC-LMM-010).

d. On no. 5 circuit breaker panel assembly (figure 1), open F EXT circuit breaker.

e. Close engine fuel shutoff valve per substeps below:

(1) Apply battery power (A1-F18AC-LMM-000).

(2) On LH and RH advisory and threat warning indicator panel, push L and R FIRE warning light.

(3) Remove battery power (A1-F18AC-LMM-000).

f. On no. 5 circuit breaker panel assembly, open L and R FUEL S/O VALVE circuit breaker.

g. In left and right MLG wheelwell, on fuel shut-off valve, make sure manual shutoff valve is in CLOSED (-) position.

h. Open door 53L or 53R (A1-F18AC-LMM-010).

i. For removal of left heat exchangers wash filter (3, detail A) do substeps below:

(1) Remove generator converter unit (A1-F18AC-420-300, WP003 00).

(2) Remove air turbine starter (A1-F18AC-240-300, WP025 00).

(3) Rotate tube (9), cap (8) away from structure.

(4) Position an approved safety container under tube (9) to catch residual fuel.



Jet Fuel



7

WARNING

To prevent personal injury, do not stand directly under cap when draining residual fuel or removing tubes.

(5) Remove cap (8) and drain residual fuel.

(6) Remove couplings (2 and 5) (WP013 00).

(7) Disconnect strap (10) by removing attaching parts.

(8) Remove tube (3) and packings (1 and 4).

j. For removal of right heat exchangers wash filter (15, detail B), do substeps below:

(1) Rotate tube (11), cap (8) away from structure.

(2) Position an approved safety container under tube (11) to catch residual fuel.

WARNING

To prevent personal injury, do not stand directly under cap when draining residual fuel or removing tubes.

(3) Remove cap (8) and drain residual fuel.

(4) Remove couplings (2 and 5) (WP013 00).

(5) Remove coupling (13) (WP013 00) and remove tube (11).

(6) Remove clamp (16) and heat exchangers down wash filter (15).

(7) Remove packings (1, 4, and 12).

2. INSTALLATION.

NOTE

Make sure corrosion prevention of fasteners and attaching parts is done during installation (A1-F18AC-LMM-000).

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).



Petrolatum

1

b. Lubricate new packings with petrolatum.

c. To install left heat exchangers wash filter (3, figure 1, detail A) do substeps below:

(1) Install packings (1 and 4) and position heat exchangers wash filter (3).

WARNING

To prevent a possible fire and/or explosion, make sure corrosion resistant steel couplings are used in high heat areas (AMAD and engine bays). Both the outer clamp and inner sleeve will have a silver grey color.

(2) Inspect, install and lockwire couplings (2 and 5) (WP013 00). (QA)

(3) Install strap (10) and attaching parts.



To prevent damage of tubes next to tube (9) make sure cap (8) points down.

NOTE

Tube (9) is installed on the left side only and some tubes have LEFT etched on its surface.

(4) Rotate tube (9) so that cap (8) is down.

(5) Install cap (8) and safety with lockwire if safetying holes in tube (9) exist. (QA)

(6) Install air turbine starter (A1-F18AC-240-300, WP025 00).

(7) Install generator converter unit (A1-F18AC-420-300, WP003 00).

d. To install right heat exchangers wash filter (15, detail B) do substeps below:

(1) Install packings (1, 4, and 12).

(2) Position heat exchangers wash filter (15) and install clamp (16) and attaching parts.

(3) Position tube (11).

WARNING

To prevent a possible fire and/or explosion, make sure corrosion resistant steel couplings are used in high heat areas (AMAD and engine bays). Both the outer clamp and inner sleeve will have a silver grey color.

(4) Inspect, install and lockwire couplings (2, 5, and 13) (WP013 00). (QA)

WARNING

To prevent tubing interference, resulting in possible fuel leaks, tube 74A587010 (11) must be installed on right side only.

CAUTION

To prevent damage to tubes next to tube (11) make sure cap (8) points down.

NOTE

Tube (11) is installed on the right side only and some tubes have RIGHT etched on its surface.

(5) Rotate right tube (11) so that cap (8) is down.

(6) Install cap (8) and safety with lockwire if safetying holes in tube (11) exist. (QA)

e. On no. 5 circuit breaker panel assembly, close L and R FUEL S/O VALVE circuit breaker.

f. Remove no power tag from external power receptacle.

g. Open engine fuel shutoff valve per substeps below:

(1) Apply battery power (A1-F18AC-LMM-000).

(2) On LH or RH advisory and threat warning indicator panel, push L and R FIRE warning light.

(3) Remove battery power (A1-F18AC-LMM-000).

h. On no. 5 circuit breaker panel assembly, close F EXT circuit breaker.

i. Close door 10R (A1-F18AC-LMM-010).

j. Do fuel leak test (A1-F18AC-LMM-000).

k. Install door 53L or 53R (A1-F18AC-LMM-010).

l. Do internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

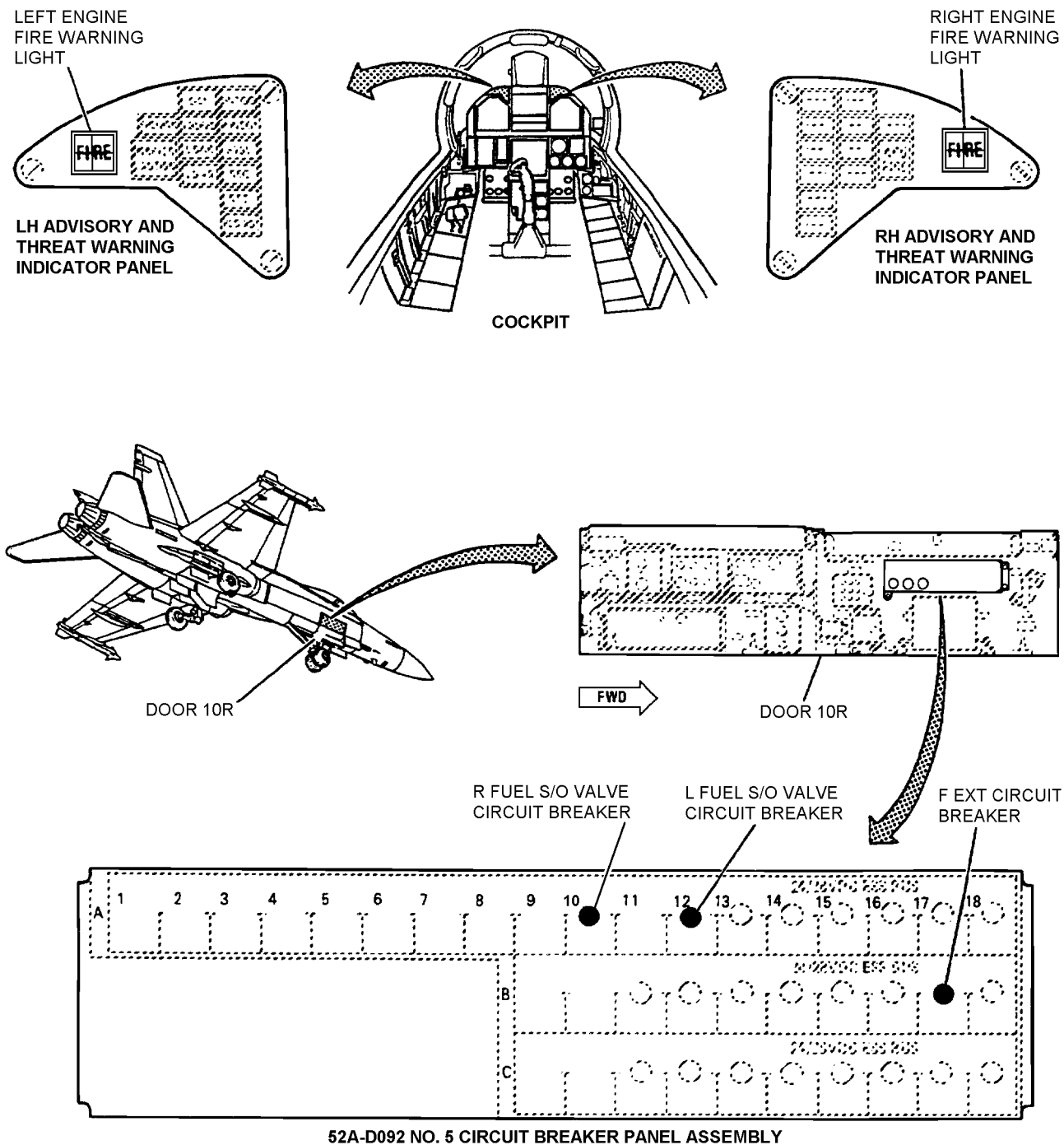


Figure 1. Heat Exchangers Wash Filter (5FAP647 or 5FAR648) (Sheet 1)

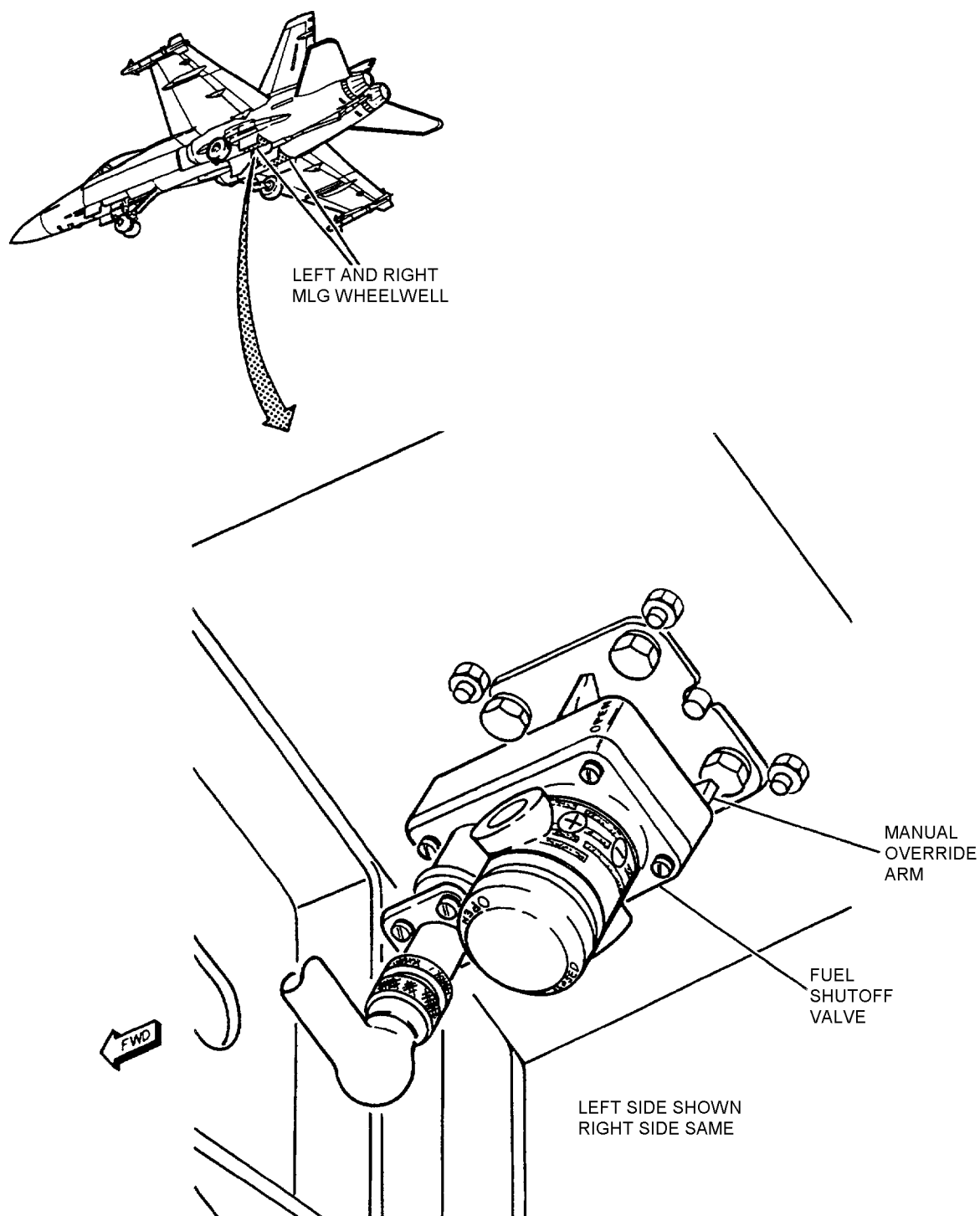


Figure 1. Heat Exchangers Wash Filter (5FAP647 or 5FAR648) (Sheet 2)

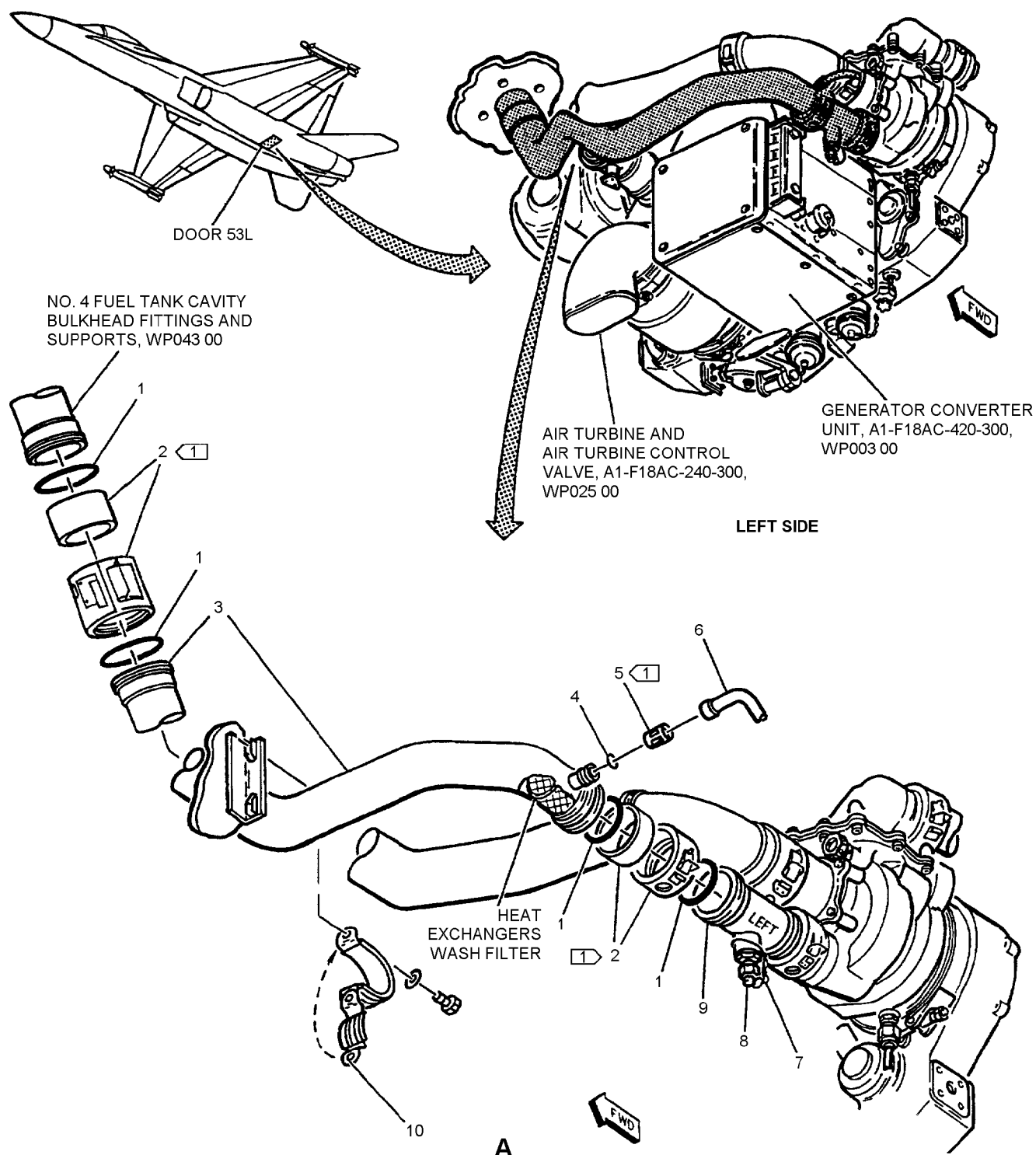


Figure 1. Heat Exchangers Wash Filter (5FAP647 or 5FAR648) (Sheet 3)

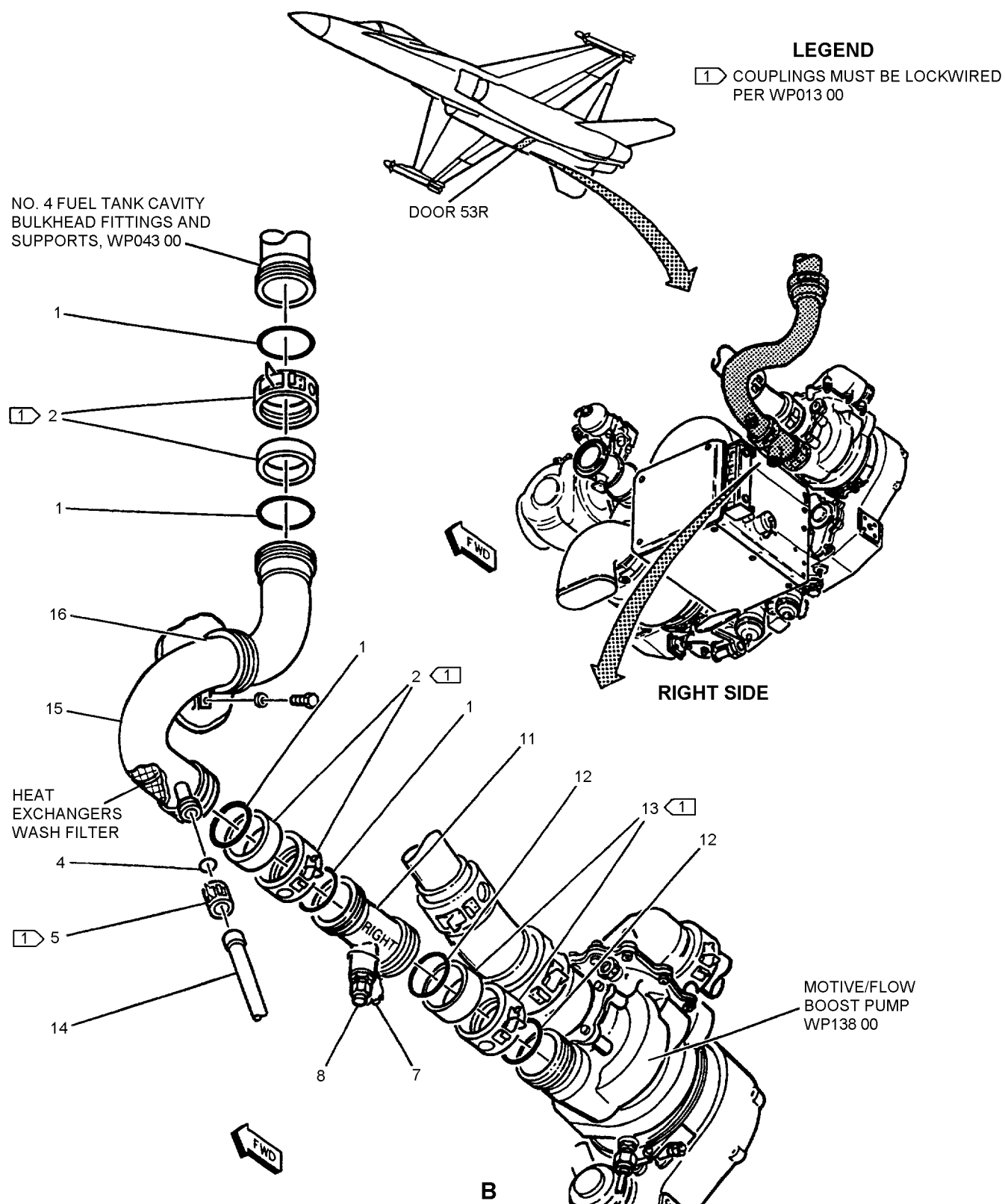


Figure 1. Heat Exchangers Wash Filter (5FAP647 or 5FAR648) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		HEAT EXCHANGERS WASH FILTER (5FAP647 OR 5FAR648)			
1	M25988/1-226	. PACKING	4		PAOZZ
2	W901K32CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-32C) (INCLUDES SLEEVE)	2	E	PAOZZ
	14J12-32C	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-32C) (INCLUDES SLEEVE)	2	E	PAOZZ
	W901F32CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-32C) (INCLUDES SLEEVE)	2	F*	PAOZZ
3	74A586961-1009	. TUBE ASSEMBLY, METAL, MAIN MOTIVE FLOW BOOST, LH (HEAT EXCHANGERS WASH FILTER) (76301) (LEFT SIDE) (5FAP647)	1		PAOGG
	74A586961-1007	. SEE ABOVE	1	*	PAOGG
	74A586961-1003	. SEE ABOVE	1	*	PAOZZ
4	M25988/1-015	. PACKING	1		PAOZZ
5	W904K8CE	. COUPLING, CLAMP, GROOVED (HALF) (79326) (MCDONNELL SPEC 7M765-8C-1)	1	E	PAOZZ
	14C12-8C	. COUPLING, CLAMP, GROOVED (HALF) (24984) (MCDONNELL SPEC 7M765-8C-1)	1	E	PAOZZ
	W904E8CE	. SEE ABOVE (79326) (MCDONNELL SPEC 7M550-8C-1)	1	F*	PAOZZ
6	74A586933-1001	. TUBE ASSEMBLY, METAL - MOTIVE FLOW CHECK VALVE, LH (76301) (LEFT SIDE ONLY)	1	A	PAOZZ
	74A586933-1003	. TUBE ASSEMBLY, METAL - MOTIVE FLOW CHECK VALVE, LH (76301) (LEFT SIDE ONLY)	1	B	PAOZZ
	74A586933-1005	. TUBE ASSEMBLY, METAL - MOTIVE FLOW CHECK VALVE, LH (76301) (LEFT SIDE ONLY)	1	D	PAOZZ
7	9M59-2-140P + 9M59-2-400P + + 51893	. WIRE ROPE ASSEMBLY (76301)	1		MGOZZ
		. WIRE ROPE ASSEMBLY (76301)	1		MGOZZ
		. SLEEVE (00779) (MCDONNELL SPEC 9M306-6) (USE WITH INDEX 7A)	2		PAOZZ
8	74A587050-2001	. CAP ASSEMBLY, DRAIN - TUBE, FUEL (76301)	1		XBOZZ
	AN929A10J	. CAP (INCLUDES AN818L10J NUT)	1	*	PAOZZ
	AN815-10J	. NIPPLE (USE WITH INDEX 8)	1		PAOZZ
	M25988/1-910	. PACKING (USE WITH NIPPLE)	1		PAOZZ
9	74A586991-1007	. TUBE ASSEMBLY, METAL - FUEL, MAIN MOTIVE FLOW BOOST, (LH) (76301) (REPLACES 74A586991-1005)	1		PAOZZ
	74A586991-1005	. TUBE ASSEMBLY, METAL - FUEL, MAIN MOTIVE FLOW BOOST, (LH) (76301) (USE UNTIL EXHAUSTED)	1	J	PAOZZ
10	TA09C89D32	. STRAP, RETAINING (84971) (MCDONNELL SPEC ST9M558D32) (LEFT SIDE ONLY)	1		PAOZZ
	NAS673V3	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
11	74A587010-1001	. TUBE ASSY, METAL - FUEL MAIN MOTIVE FLOW BOOST, RH (76301) (REPLACES 74A586991-1007 AND 74A586991-1005)	1	H	PAOZZ
	74A586991-1007	. SEE ABOVE (REPLACES 74A586991-1005) (USE UNTIL EXHAUSTED)	1	G	PAOZZ
	74A586991-1005	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	C	PAOZZ
12	M25988/1-226	. PACKING	2		PAOZZ

Figure 1. Heat Exchangers Wash Filter (5FAP647 or 5FAR648) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
13	W901K32CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-32C) (INCLUDES SLEEVE) (RIGHT SIDE)	1		PAOZZ
	14J12-32C	. SEE ABOVE (24984)	1		PAOZZ
	W901F32CE	. SEE ABOVE (79326) (MCDONNELL SPEC 7M550-32C)	1	*	PAOZZ
14	74A587018-1001	. TUBE ASSEMBLY, METAL - FUEL, MOTIVE FLOW CHECK VALVE, RH (76301)	1	A	PAOZZ
	74A587018-1003	. TUBE ASSEMBLY, METAL - FUEL, MOTIVE FLOW CHECK VALVE, RH (76301)	1	B	PAOZZ
	74A587018-1005	. TUBE ASSEMBLY, METAL - FUEL, MOTIVE FLOW CHECK VALVE, RH (76301)	1	D	PAOZZ
15	74A586955-1011	. TUBE ASSEMBLY, METAL - FUEL, MAIN MOTIVE FL BOOST Y541.1 (HEAT EXCHANGERS WASH FILTER) (76301) (5FAR648)	1		PAOGG
	74A586955-1009	. SEE ABOVE	1	*	PAOGG
	74A586955-1005	. SEE ABOVE	1	*	PAOGG
16	JM44LC33WD32	. CLAMP, LOOP (22175) (MCDONNELL SPEC ST9M630D32) (RIGHT SIDE ONLY)	1		PAOZZ
	NAS673V3	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ

+ USE WITH 74A586991-1005 TUBE.

++USE WITH 74A586991-1007 &
74A587010-1001 TUBE.

¢ MADE FROM AN929A210J.

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161353 THRU 161519 BEFORE F/A-18 AFC 21	F/A-18A/B
B	161520 THRU 161761; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 21	F/A-18A/B
C	161353 THRU 161528 BEFORE F/A-18 1AFC 100	F/A-18A/B
D	161924 & UP	F/A-18A/B
E	161924 & UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 43	F/A-18A/B

Figure 1. Heat Exchangers Wash Filter (5FAP647 or 5FAR648) (Sheet 6)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		F				161353 THRU 161761 BEFORE F/A-18 AFC 43		F/A-18A/B			
		G				161353 THRU 162907 BEFORE F/A-18 IAFC 100		F/A-18A/B			
		H				162908 & UP; ALSO 161353 THRU 162907 AFTER F/A-18 IAFC 100		F/A-18A/B			
		J				161353 THRU 161528		F/A-18A/B			

Figure 1. Heat Exchangers Wash Filter (5FAP647 or 5FAR648) (Sheet 7)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****FUEL BOOST PRESSURE SWITCH (5S-P113 OR 5S-R114)****ENGINE FUEL SUPPLY SYSTEM**

**EFFECTIVITY: 163119 AND UP; ALSO 161353 THRU 161924 BEFORE
F/A-18 IAFC 056 OR 161353 THRU 16311B AFTER F/A-18 AFC 70**

Reference Material

Fuel System A1-F18AC-460-300
Motive Flow/Boost Pump WP138 00
Line Maintenance Access Doors A1-F18AC-LMM-010
Line Maintenance Procedures A1-F18AC-LMM-000

Alphabetical Index

Subject	Page No.
Illustrated Parts Breakdown	3
Left Fuel Boost Pressure Switch (5S-P113)	2
Installation	2
Removal	2
Right Fuel Boost Pressure Switch (5S-R114)	2
Installation	2
Removal	2
Switch Test	2

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 70	-	Incorporation of Motive Flow Boost Pump Pressure Switch (ECP MDA-F/A-18-00158R2)	15 Jul 96	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC32 (CAGE 96906)
Packing	M25988/1-904
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. LEFT FUEL BOOST PRESSURE SWITCH (5S-P113).**2. REMOVAL.**

- a. Remove motive flow/boost pump (WP138 00).
- b. Remove lockwire from switch (1, figure 1, sheet 2).
- c. Remove switch (1) and packing (2) from motive flow/boost pump.

3. INSTALLATION.

- a. Prepare mating surfaces of switch (1, figure 1, sheet 2) and motive flow/boost pump for electrical bonding (A1-F18AC-LMM-000).



Petrolatum

1

- b. Lubricate new packing with petrolatum.
- c. Install packing (2) and switch (1).
- d. Safety switch (1) with lockwire. (QA)
- e. Install motive flow/boost pump (WP138 00).

4. RIGHT FUEL BOOST PRESSURE SWITCH (5S-R114).**5. REMOVAL.**

- a. Remove motive flow/boost pump (WP138 00).
- b. Remove lockwire from switch (1, figure 1, sheet 2).
- c. Remove switch (1) from elbow (3).

6. INSTALLATION.

Petrolatum

1

- a. Lubricate new packing with petrolatum.
- b. Prepare mating surfaces of switch (1, figure 1, sheet 2) and elbow (3) for electrical bonding (A1-F18AC-LMM-000).
- c. Install switch (1) on elbow (3).
- d. Safety switch (1) with lockwire. (QA)
- e. Install motive flow/boost pump (WP138 00).

7. SWITCH TEST.

- a. Open door 10R (A1-F18AC-LMM-010) and close L and R FUEL S/O VALVE circuit breaker on no. 5 circuit breaker panel assembly (figure 1).

- b. Open left and right engine fuel shutoff valve per substeps below:

- (1) Apply battery power (A1-F18AC-LMM-000).

- (2) On LH and RH advisory and threat warning indicator panels, push L and R FIRE warning light.

- (3) Remove battery power (A1-F18AC-LMM-000).

- c. Close F EXT circuit breaker on no. 5 circuit breaker panel assembly and close door 10R (A1-F18AC-LMM-010).

- d. Do fuel leak test (A1-F18AC-LMM-000).

e. Operate APU with applicable AMAD in ground maintenance mode (A1-F18AC-LMM-000).

f. Set up cockpit digital display indicator for display (A1-F18AC-LMM-000) and test for indications below:

(1) For left switch (1) installation, make sure L BOOST LO is off and R BOOST LO is on.

(2) For right switch (1) installation, make sure R BOOST LO is off and L BOOST LO is on.

g. Turn cockpit digital display indicator power switch OFF.

h. Shut down APU (A1-F18AC-LMM-000).

8. ILLUSTRATED PARTS BREAKDOWN.

9. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

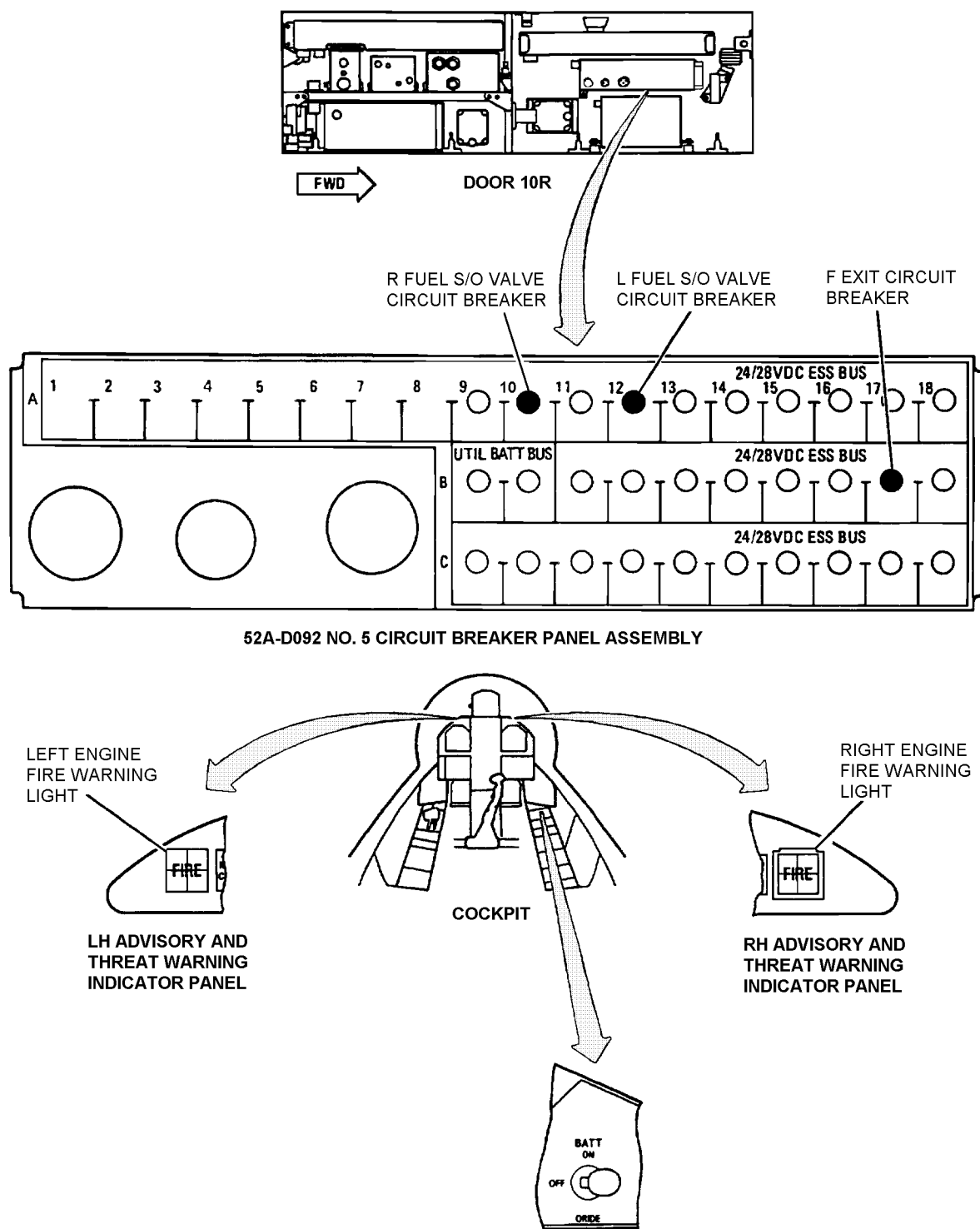


Figure 1. Fuel Boost Pressure Switch (5S-P113 or 5S-R114) (Sheet 1)

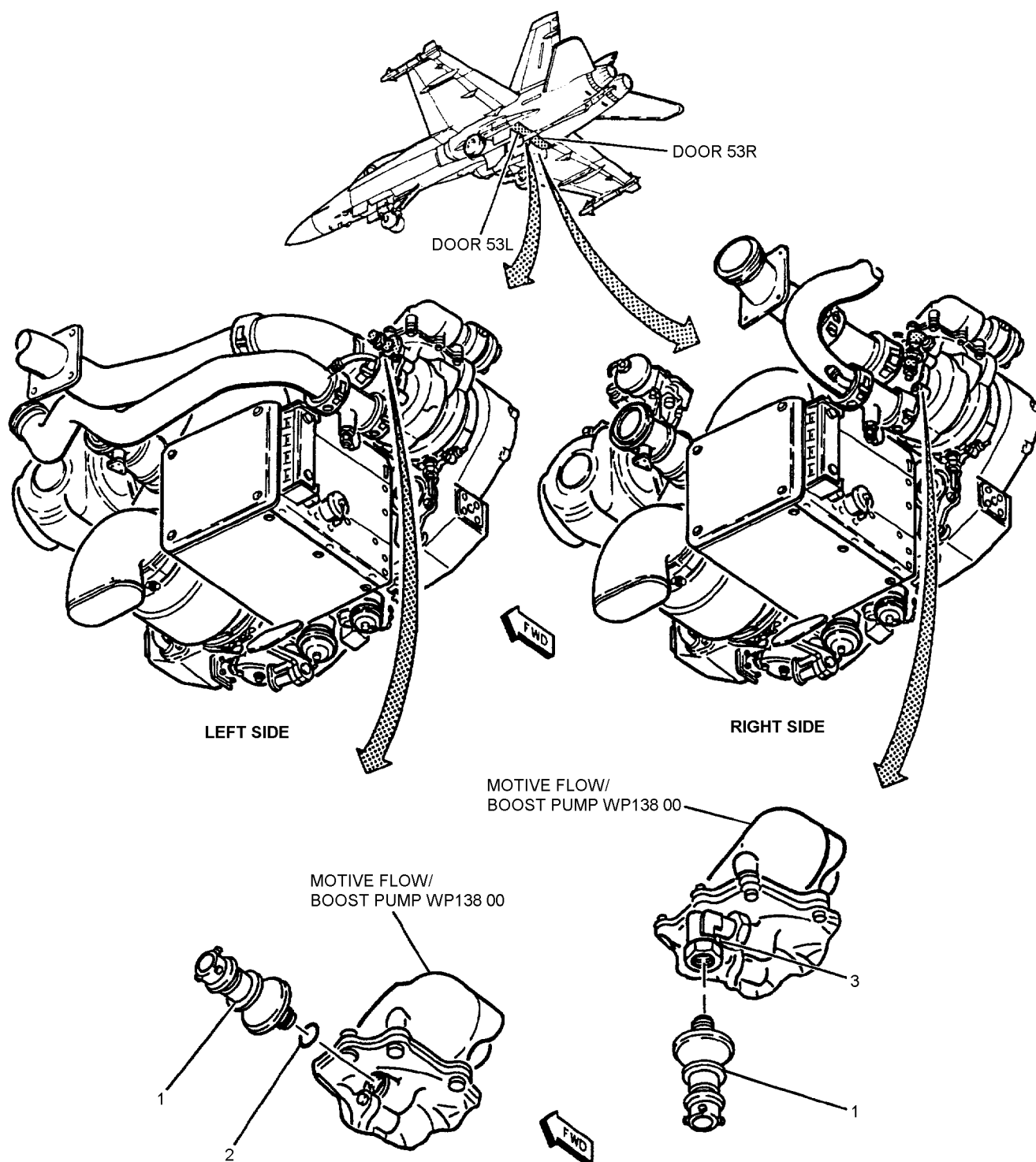


Figure 1. Fuel Boost Pressure Switch (5S-P113 or 5S-R114) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		FUEL BOOST PRESSURE SWITCH (5S-P113 OR 5S-R114)									
1	211C117-180	.	SWITCH, PRESSURE - FUEL (FUEL BOOST PRESSURE SWITCH) (02750) (MCDONNELL SPEC 74-5B0167-119) (5S-P113 OR 5S-R114) (REPLACES 12446-105 AND 12446-111)						1	C*	PAOZZ
	2299-19	.	SEE ABOVE (55723)						1	C*	PAOZZ
	12446-111	.	SEE ABOVE (MCDONNELL SPEC 74-580167-111) (USE UNTIL EXHAUSTED)						1	B	PAOZZ
	12446-105	.	SEE ABOVE (98505) (MCDONNELL SPEC 74-580167-101) (USE UNTIL EXHAUSTED)						1	A	PAOZZ
2	M25988/1-904	.	PACKING (LEFT SIDE ONLY)						1		PAOZZ
3	ST7M263J4	.	ELBOW (76301) (RIGHT SIDE ONLY)						1		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161353 THRU 161367 BEFORE F/A-18 IAFC 056 AND BEFORE F/A-18 AFC 70	F/A-18A/B
B	161353 THRU 161924 BEFORE F/A-18 IAFC 056 AND BEFORE F/A-18 AFC 70	F/A-18A/B
C	163119 AND UP; ALSO 161353 THRU 163118 AFTER F/A-18 AFC 70	F/A-18A/B

Figure 1. Fuel Boost Pressure Switch (5S-P113 or 5S-R114) (Sheet 3)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

ENGINE FUEL COUPLING CHECK VALVE (5VAP639 OR 5VAR640)

ENGINE FUEL SUPPLY SYSTEM

Reference Material

Fuel System	A1-F18AC-460-330
Crossfeed Manifold	WP145 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Manual	A1-F18AC-LMM-000

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Removal	1

Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required (Cont)

Materials Required		Nomenclature	Specification or Part Number
Nomenclature	Specification or Part Number	Petrolatum, Technical	VV-P-236 (CAGE 81348)
		1. REMOVAL.	
		a. Open door 64 L or R (A1-F18AC-LMM-010).	
		b. Open door 10R (A1-F18AC-LMM-010).	
		c. On no. 5 circuit breaker panel (figure 1), open	
		F EXT circuit breaker.	
Lockwire	MS20995NC32 (CAGE 96906)		
Packing	J228P226		
Packing	M25988/1-231		

d. Close fuel shutoff valve per substeps below:

(1) Apply battery power (A1-F18AC-LMM-000).

(2) On LH and RH advisory and threat warning indicator panel, push L and R FIRE warning light.

(3) Remove battery power (A1-F18AC-LMM-000).

(4) On no. 5 circuit breaker panel, open L and R FUEL S/O VALVE circuit breakers.

(5) In left and right MLG wheelwell, on fuel shutoff valve, make sure manual override arm is in the CLOSED (-) position.

e. Make sure electrical power is not applied (A1-F18AC-LMM-000).

f. Tag aircraft external power receptacle with an appropriate warning to indicate external power is not applied to the aircraft.

g. Position an approved safety container under coupling (2, figure 1, sheet 3) to catch residual fuel.



Jet Fuel

7

h. Disconnect fuel inlet tube from coupling (2) by pulling locking ring aft, turning threaded ring counter-clockwise and pulling aft on fuel inlet tube.

i. Remove lockwire from coupling (2).

j. Remove coupling (2) from crossfeed manifold (WP145 00).

2. INSTALLATION.



Petrolatum

1

a. Lubricate packings (1 and 3, figure 1, sheet 3) with petrolatum.

b. Install packings (1 and 3).

c. Install coupling (2) in crossfeed manifold (WP145 00). Safety with lockwire. (QA)



Be sure fuel inlet tube coupling is completely on bulkhead coupling (2) before tightening. Handtighten only, do not use a strap wrench.

d. Slide fuel inlet tube forward to mate squarely with coupling (2), turn clockwise and handtighten.

e. Remove no power tag from external power receptacle.

f. Open left and right engine fuel shutoff valves per substeps below:

(1) Make sure electrical power is off (A1-F18AC-LMM-000).

(2) On no. 5 circuit breaker panel, close L and R FUEL S/O VALVE circuit breakers.

(3) Apply battery power (A1-F18AC-LMM-000).

(4) On LH and RH advisory and threat warning indicator panel, push L and R FIRE warning light.

(5) Remove battery power (A1-F18AC-LMM-000).

(6) On no. 5 circuit breaker panel, close F EXT circuit breaker.

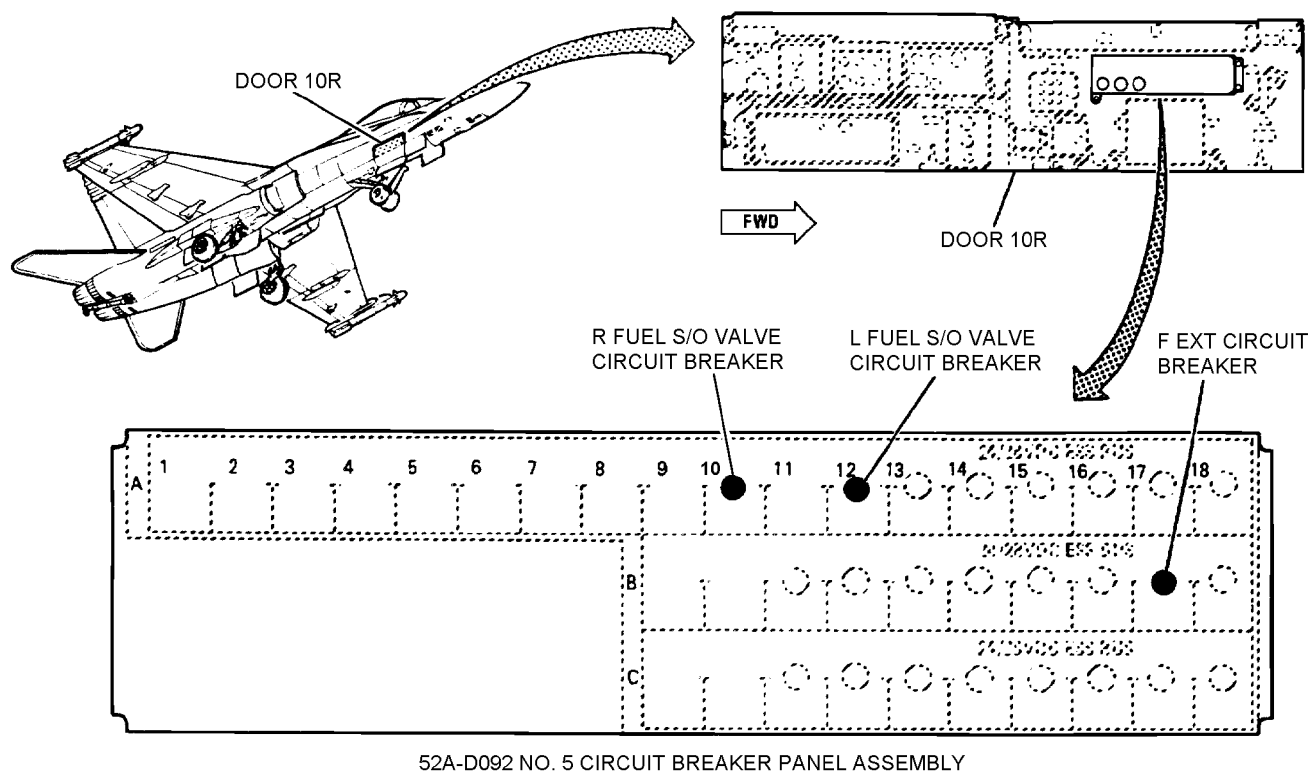
(7) Close door 10R (A1-F18AC-LMM-010).

g. Do fuel leak test (A1-F18AC-LMM-000).

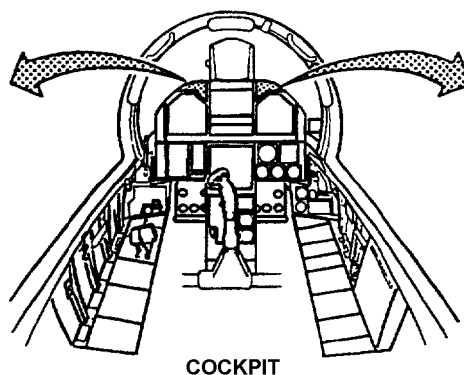
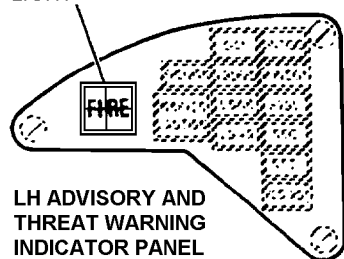
h. Close door 64 L or R (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.



LEFT ENGINE
FIRE WARNING
LIGHT



RIGHT ENGINE
FIRE WARNING
LIGHT

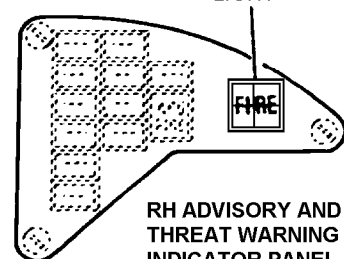


Figure 1. Engine Fuel Coupling Check Valve (5VAP639 or 5VAR640) (Sheet 1)

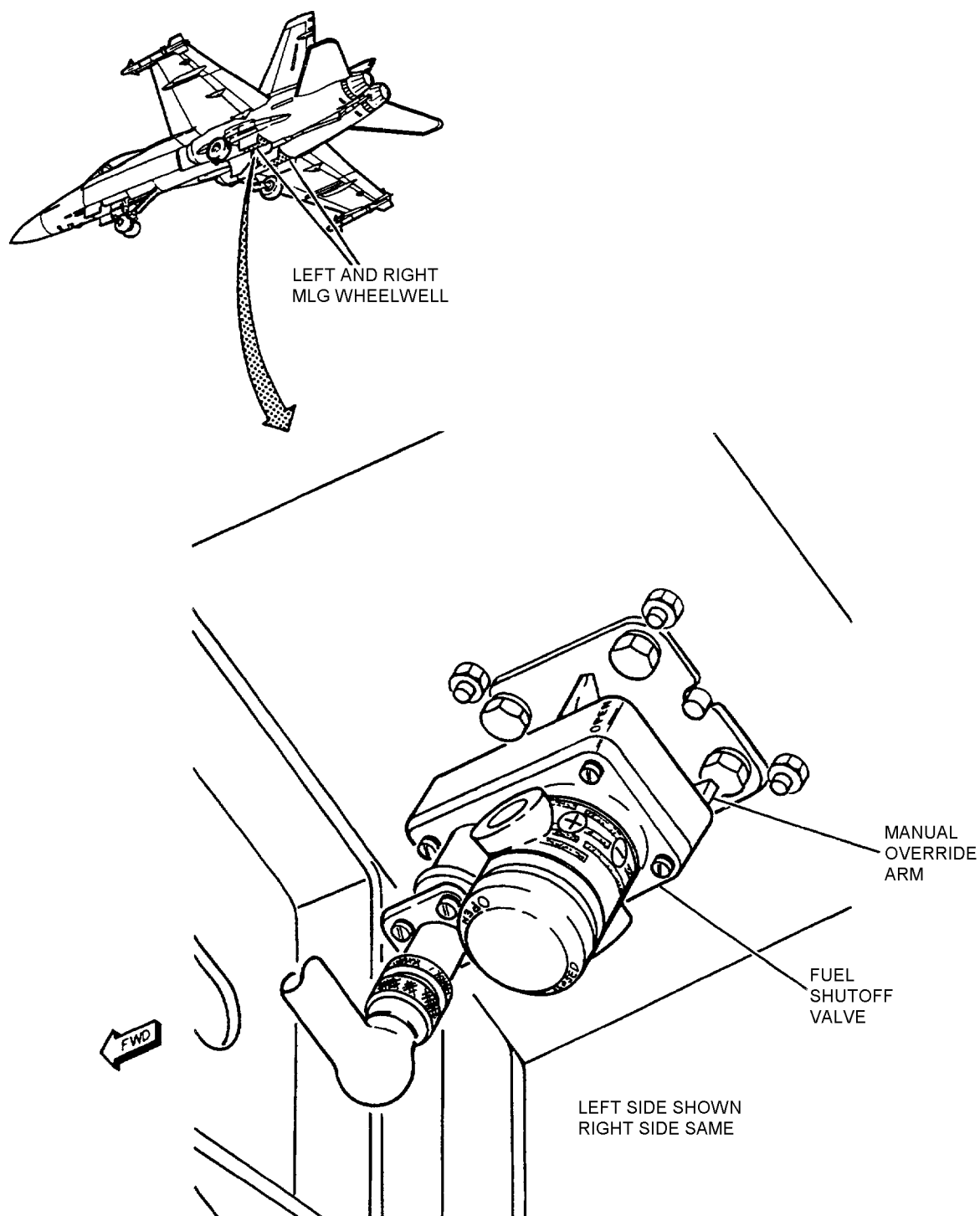


Figure 1. Engine Fuel Coupling Check Valve (5VAP639 or 5VAR640) (Sheet 2)

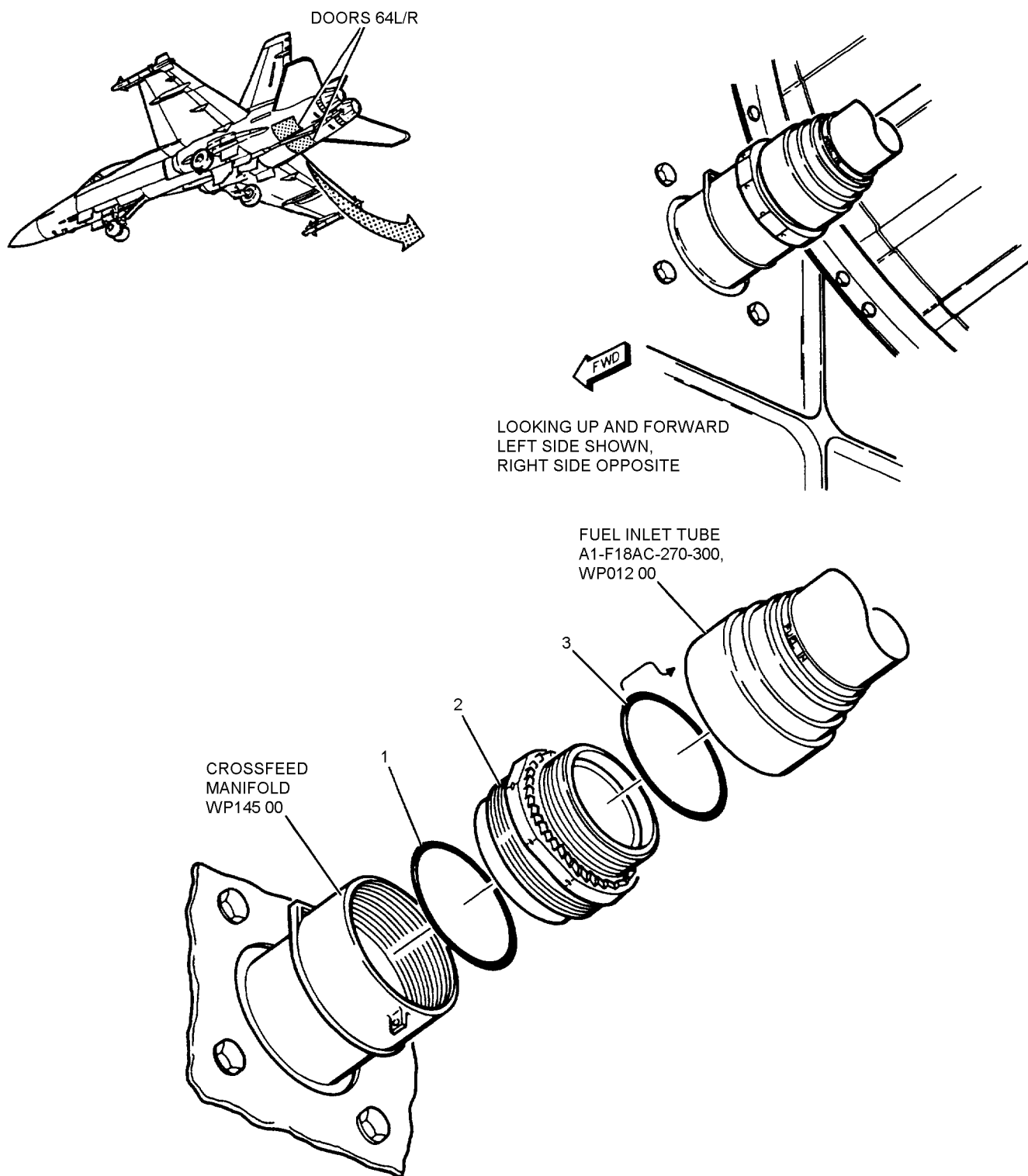


Figure 1. Engine Fuel Coupling Check Valve (5VAP639 or 5VAR640) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		ENGINE FUEL COUPLING CHECK VALVE									
		(5VAP639 OR 5VAR640)									
1	M25988/1-231	.	PACKING						1		PAOZZ
2	AE82134R	.	COUPLING HALF, QUICK DISCONNECT -						1		PAOZZ
		FUEL LINES (LH OR RH) (ENGINE									
		FUEL COUPLING CHECK VALVE)									
		(00624) (MCDONNELL SPEC 74-500055-101)									
		(5VAP639 OR 5VAR640) (REPLACES									
		AE99884R)									
	AE99884R	.	COUPLING HALF, QUICK DISCONNECT -						1		PAOZZ
		FUEL LINES (LH OR RH) (ENGINE									
		FUEL COUPLING CHECK VALVE)									
		(00624) (MCDONNELL SPEC 74-500055-101)									
		(5VAP639 OR 5VAR640) (USE UNTIL									
		EXHAUSTED)									
3	J228P226	.	PACKING, PREFORMED (99207) (GF AE)						1		PAOZZ

Figure 1. Engine Fuel Coupling Check Valve (5VAP639 or 5VAR640) (Sheet 4)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

FUEL DUMP VALVE (5B-P069)

FUEL DUMP SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Aft Access Cover	WP008 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuselage Fuel Tanks Motive Flow/Transfer Tubes Coupling Inspection	WP013 01
Inspection	WP013 01
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captain Manual	A1-F18AC-PCM-000

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Fuel Dump Valve - Motor Assembly	2
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Illustrated Parts Breakdown	4

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 IAFC 017 Part 1 and Part 2	19 Jul 84	Fuel System Tank No. 4 Fuel Transfer Man- ifold, Modification of (ECP MDA-F/ A-18-00084R1)	1 Jun 84	-
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 83	-

1. FUEL DUMP VALVE - MOTOR ASSEMBLY.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29513-214
Packing (9)	MS29513-230
Petrolatum, Technical	VV-P-236 (CAGE 81348)

2. REMOVAL.

a. Defuel tank 4 below 3200 pounds (A1-F18AC-PCM-000).

b. In cockpit, on FUEL system control panel, make sure DUMP switch is set to OFF.

c. Do or observe applicable fuel tank maintenance precautions (WP013 00).

d. Remove doors 43 and 49 (A1-F18AC-LMM-010).

e. Remove clamps (1, 2, and 3, figure 1, detail A) and move wire bundle away from work area.

f. Disconnect connector (28, detail D).

g. Remove motor (27), packing (29), and attaching parts.

3. INSTALLATION.

NOTE

Make sure corrosion prevention of fasteners and attaching parts is done during installation (A1-F18AC-LMM-000).

a Do or observe applicable fuel tank maintenance precautions (WP013 00).



Petrolatum

1

b. Lubricate new packing with petrolatum.

c. Prepare mating surfaces of dorsal deck and motor (27, figure 1, detail D) for electrical bond (A1-F18AC-LMM-000).



Dump valve failure may result if motor is not properly mated with butterfly valve and flush against dorsal deck. Motor will only engage butterfly-valve one way. (Details E and F)

d. Trial install motor (27) with indicator in CLOSED position and without packing (29) installed.

e. If motor (27) does not set flush against dorsal deck, adjust motor, using motor itself until motor is mated with valve (9) and flush against dorsal deck.

f. With indicator in CLOSED position, carefully remove motor (27) to install packing (29). Re-install motor (27), engaging butterfly valve (9), and install attaching parts.

g. Connect connector (28).

h. Connect utility and emergency battery connectors (WP013 00).

i. Inspect dump valve motor operation per paragraph 7.

4. FUEL DUMP VALVE - BUTTERFLY VALVE.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (9)	MS29513-230
Petrolatum, Technical	VV-P-236 (CAGE 81348)

5. REMOVAL.

- a. In cockpit, on FUEL system control panel, make sure DUMP switch is set to OFF (figure 1).
- b. Do general preparation for removal (WP013 00).
- c. Remove couplings (26, detail C), packings (25), clamp (23), tube (22) and attaching parts.
- d. On 161983 AND UP; ALSO 161353 THRU 161982 AFTER F/A-18 IAFC 017 Part 1 and Part 2, remove electrical lead (5, detail B), fuel duct assembly (6), tube (7), packings (10) and attaching parts.
- e. On 161353 THRU 161982 BEFORE F/A-18 IAFC 017 Part 1 and Part 2, remove tube (16 or 19, detail B), couplings (15 or 20), packings (12 or 18) and attaching parts.
- f. Remove bolts (31 and 35, detail D) with washers.
- g. Remove coupling (26), valve (9), adapter (8), packings (33) and plate (30).
- h. Remove adapter (8), bolts (34) and washers from valve (9).

6. INSTALLATION.

- a. Do general preparation for installation (WP013 00).



Petrolatum

1

- b. Lubricate all new packings with petrolatum.
- c. Prepare mating surfaces of valve (9, figure 1, detail D) and adapter (8) for electrical bond (A1-F18AC-LMM-000).
- d. Install bolts (34) and washers, and adapter (8) on valve (9).
- e. Prepare mating surfaces of adapter (8) and plate (30) for electrical bond (A1-F18AC-LMM-000).



Dump valve failure may result if butterfly valve is not properly mated with motor and flush against dorsal deck. Butterfly valve will only engage motor one way. (Details E and F)

- f. With motor (27) indicator in closed position and butterfly valve (9) closed (see detail D, missing spline teeth pointing in direction of AFT arrow), position butterfly valve (9) with adapter (8) and plate (30) flush against fuel tank, mating with motor (27).

- g. After butterfly valve (9) with adapter (8) and plate (30) is seated, install bolts (31 and 35) and washers. Make sure arrow on valve (9) is pointing AFT.

- h. Install packings (33) and couplings (26).

- i. On 161983 AND UP, ALSO 161353 THRU 161982 AFTER F/A-18 IAFC 017 Part 1 and Part 2, do substeps below:

(1) Prepare fuel duct assembly (6, detail B) and attaching parts for electrical bond (A1-F18AC-LMM-000).

(2) Install packings (10), tube (7), fuel duct assembly (6), electrical lead (5) and attaching parts.

- j. On 161353 THRU 161982 BEFORE: F/A-18 IAFC 017 Part 1 and Part 2, do substeps below:

(1) Prepare tube (16 or 19) and attaching parts for electrical bond (A1-F18AC-LMM-000).



To prevent binding of tube install coupling first, then attaching parts.

(2) Install packings (12), tube (16), coupling (15), bolts (13) and attaching parts, or install packings (18), tube (19), coupling (20) and attaching parts.

- k. Install packings (25, detail C), couplings (26), tube (22), clamp (23) and attaching parts.

- l. Do fuselage fuel tanks motive flow/transfer tubes coupling inspection (WP013 01). (QA)

m. Install no. 4 fuel tank aft access cover (WP008 00) but do not install door 49.

n. Connect utility and emergency battery connectors (WP013 00).

o. Inspect butterfly valve (9) operation per paragraph 7.

7. DUMP VALVE TEST. (QA)

WARNING

To prevent personal injury and fire hazard from fuel dumping, use external power only.

a. Apply external electrical power (A1-F18AC-LMM-000).

b. In cockpit, on FUEL system control panel, hold DUMP switch to ON (figure 1).

c. Make sure dump valve opens by observing indicator on motor.

d. Release DUMP switch.

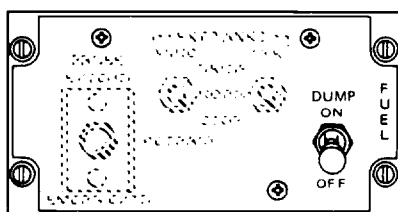
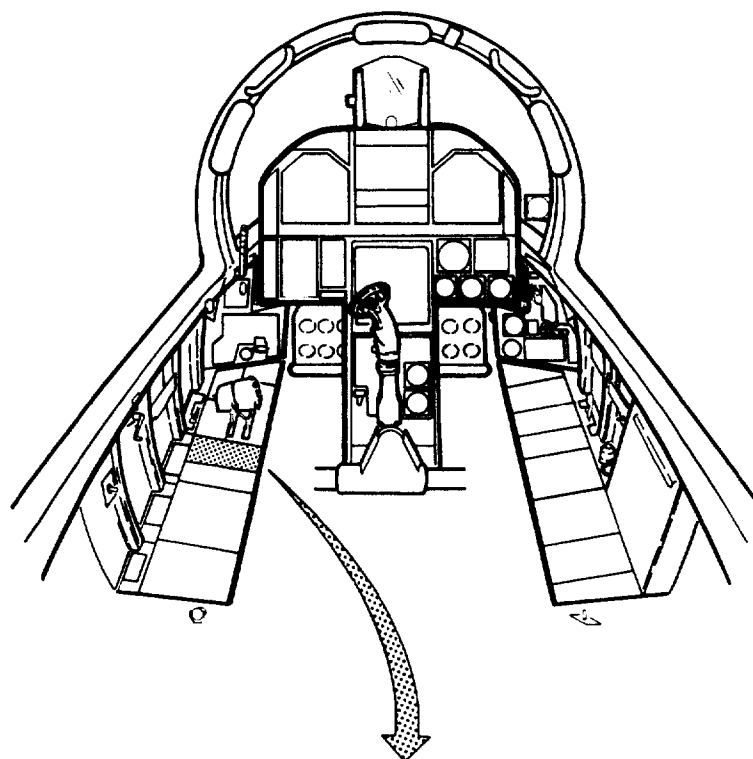
e. Make sure dump valve closes by observing indicator on motor.

f. Remove external electrical power (A1-F18AC-LMM-000).

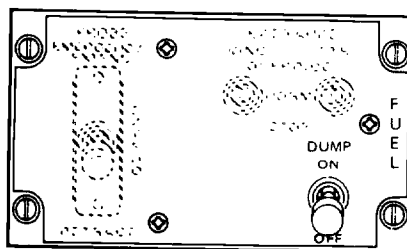
g. Install doors 43 and 49 (A1-F18AC-LMM-010).

8. ILLUSTRATED PARTS BREAKDOWN.

9. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.



161702 AND UP



161353 THRU 161528

Figure 1. Fuel Dump Valve (5B-P069) (Sheet 1)

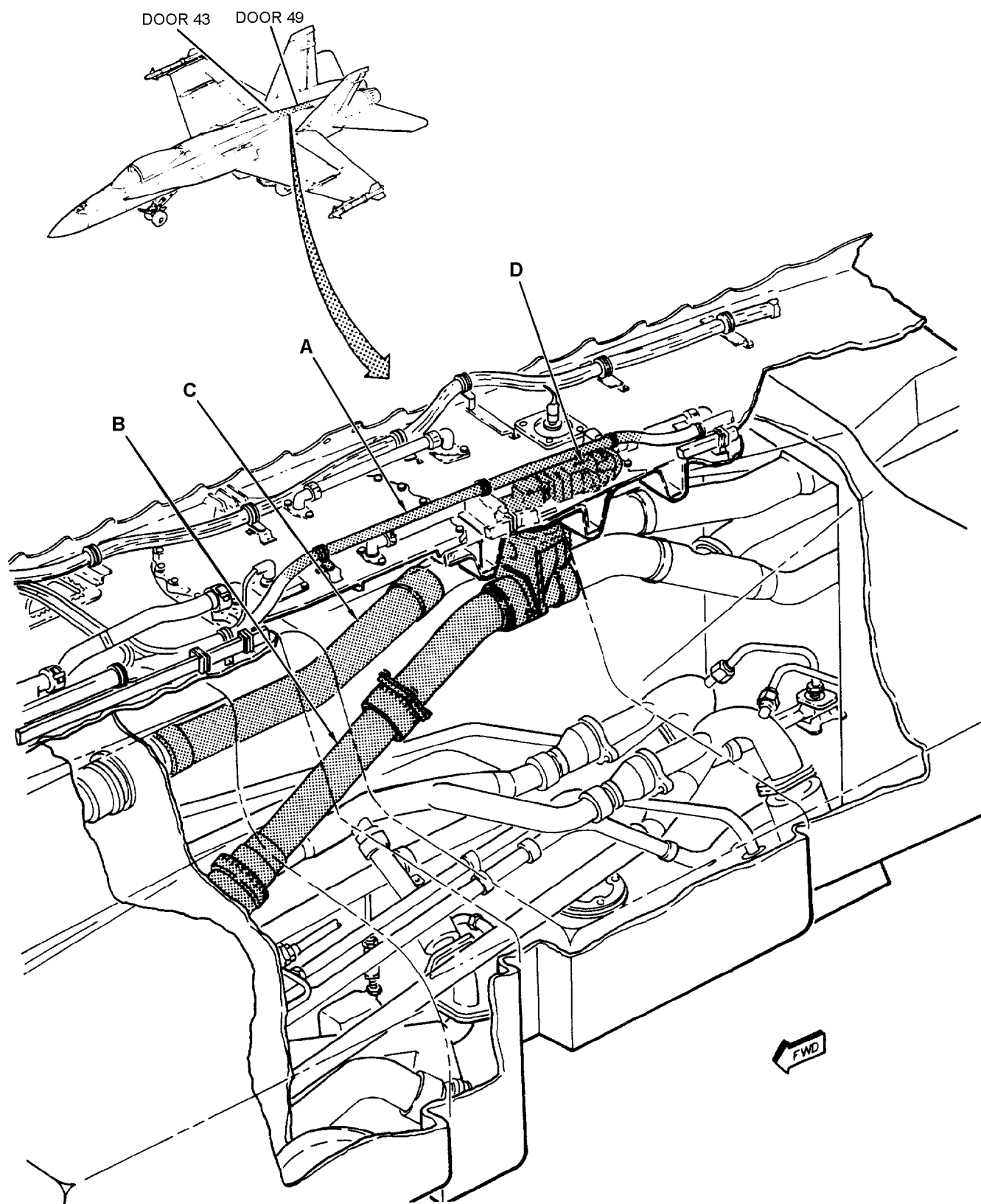


Figure 1. Fuel Dump Valve (5B-P069) (Sheet 2)

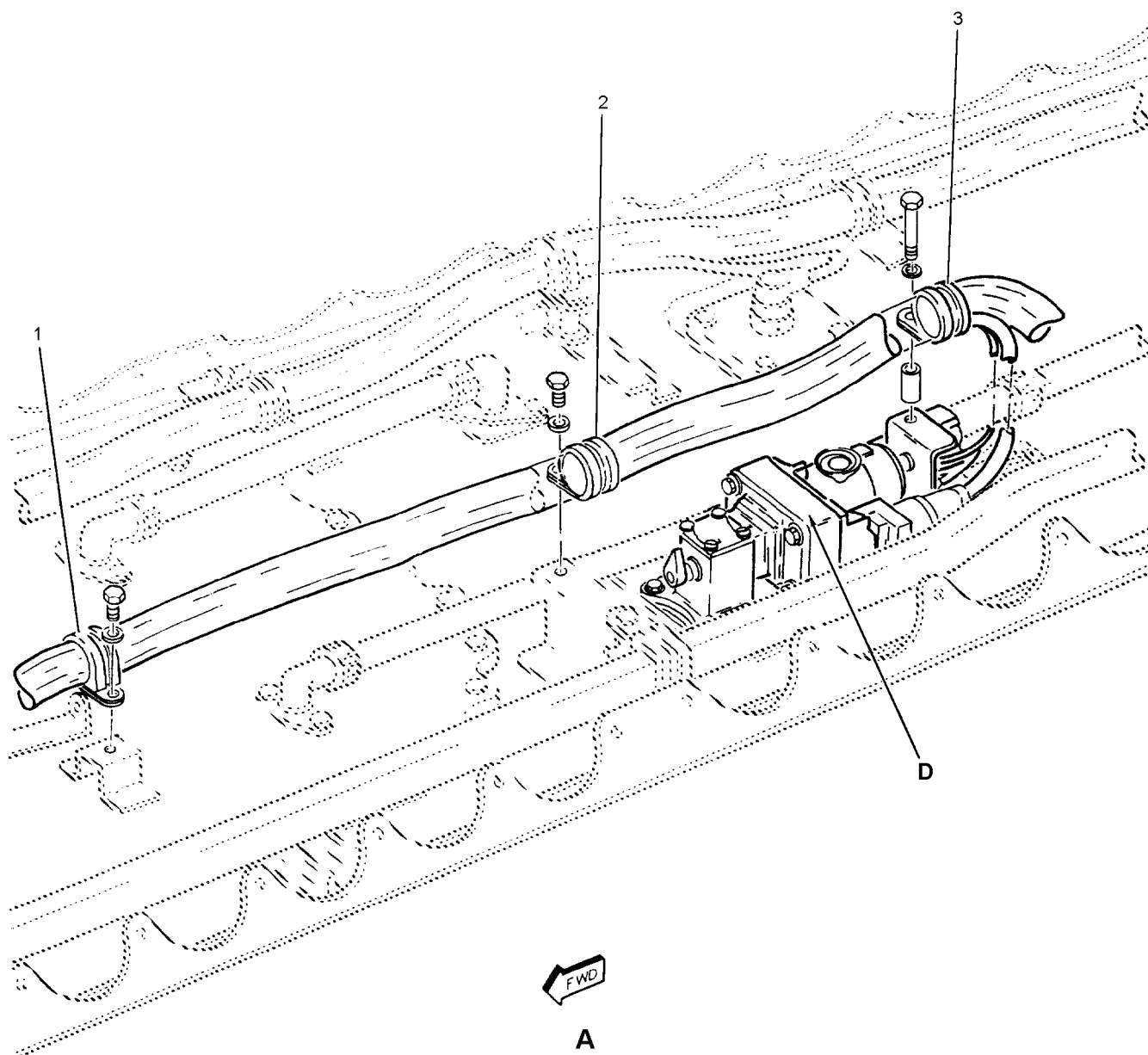


Figure 1. Fuel Dump Valve (5B-P069) (Sheet 3)

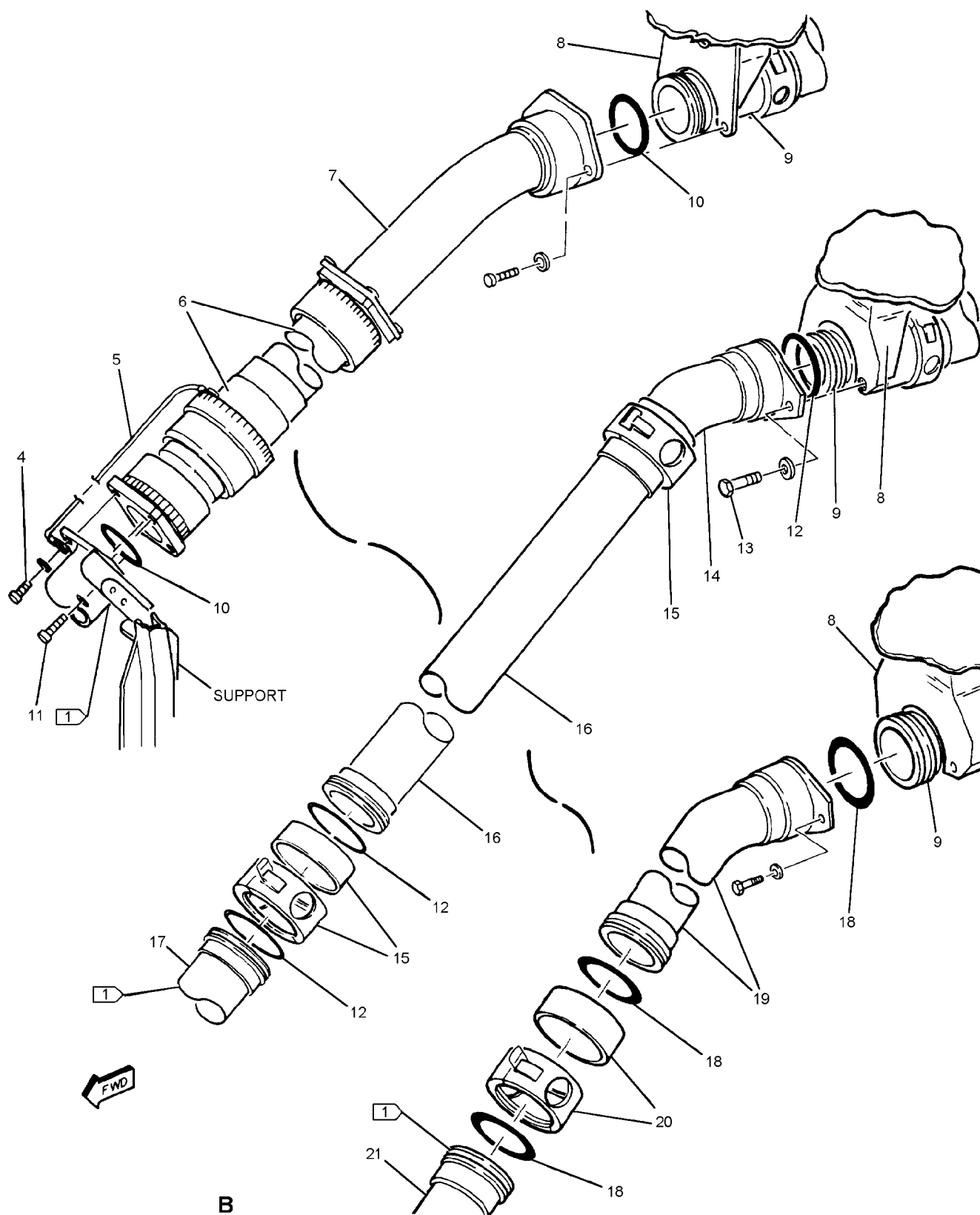


Figure 1. Fuel Dump Valve (5B-P069) (Sheet 4)

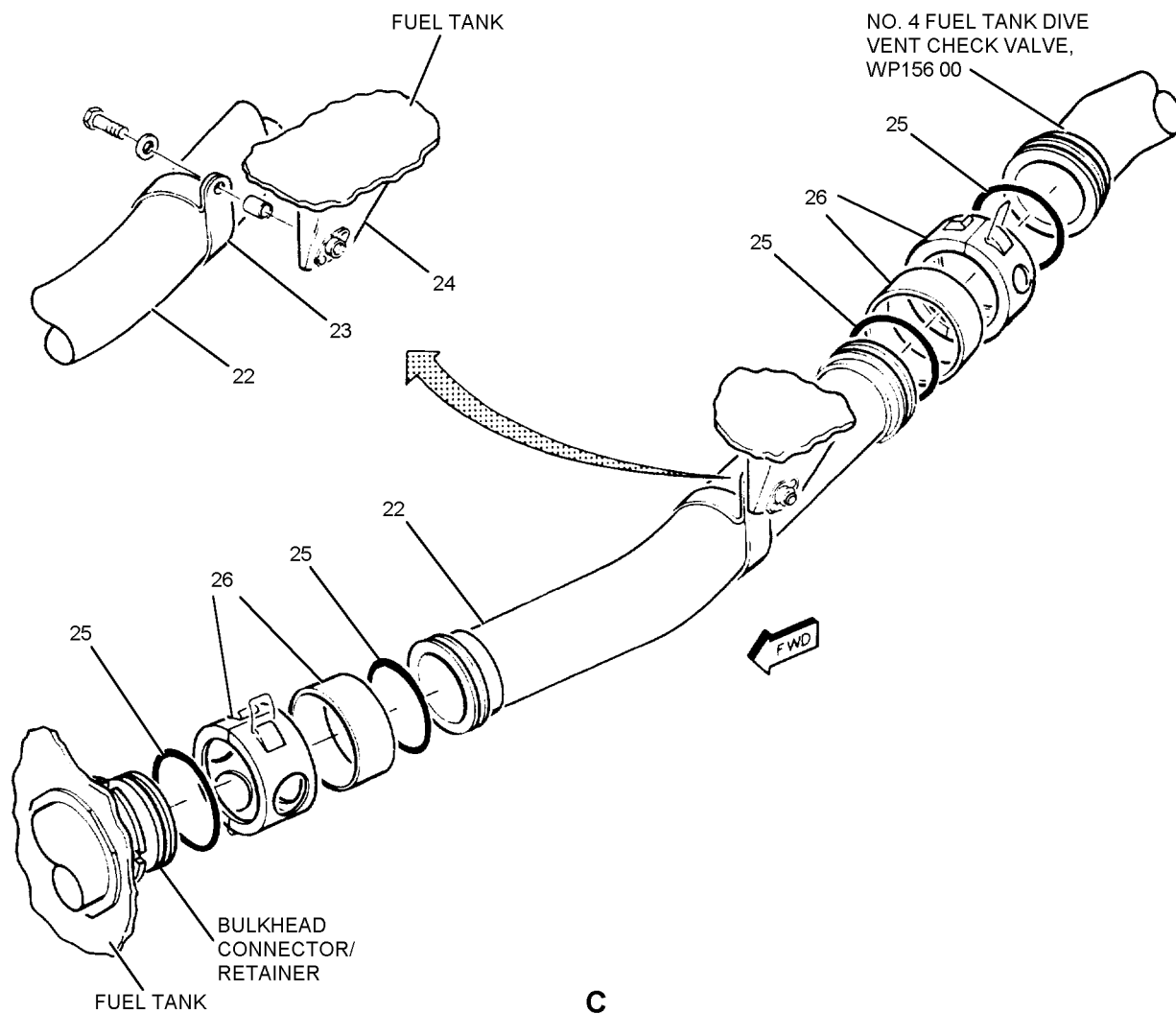


Figure 1. Fuel Dump Valve (5B-P069) (Sheet 5)

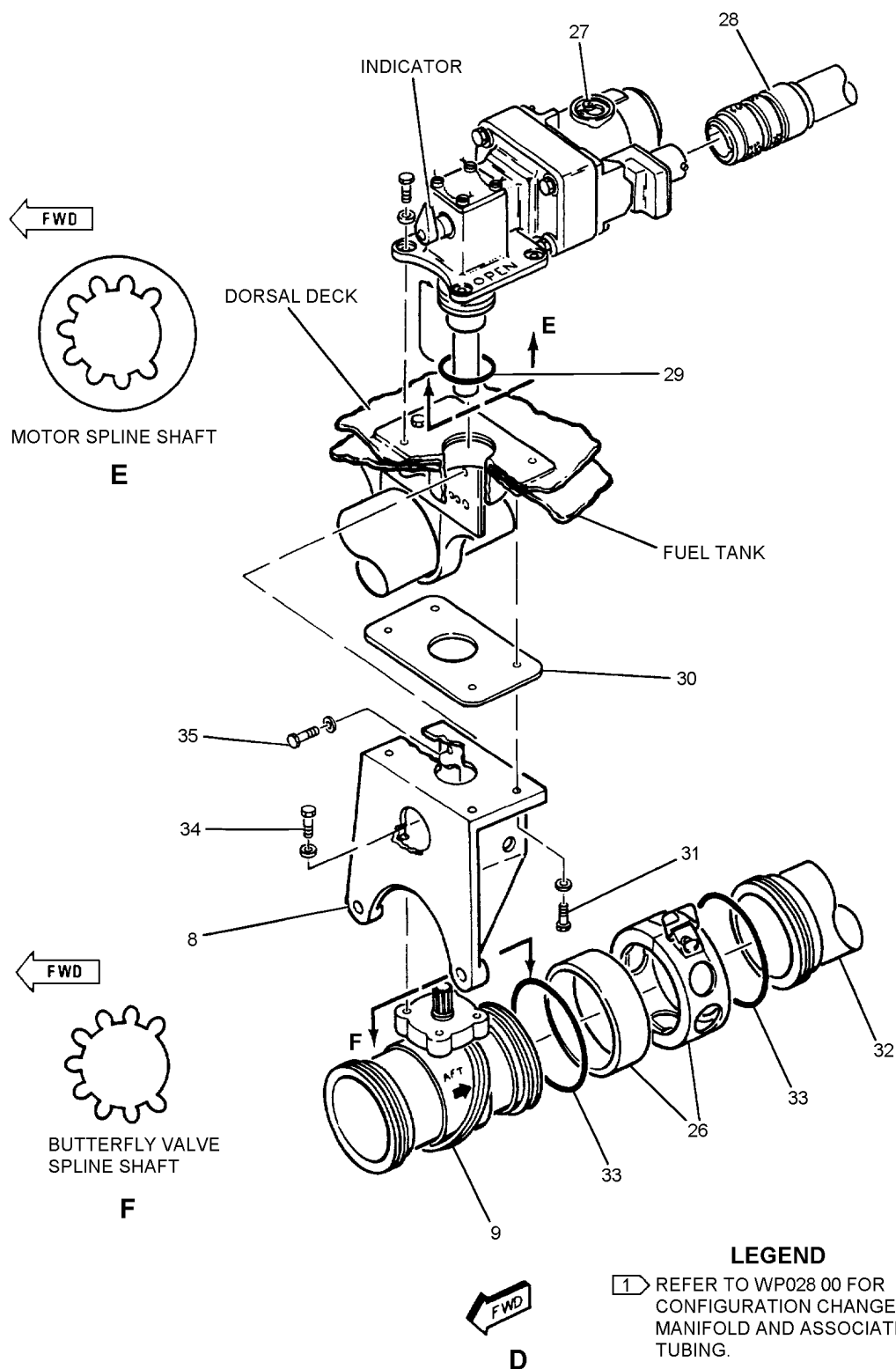


Figure 1. Fuel Dump Valve (5B-P069) (Sheet 6)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		FUEL DUMP VALVE (5B-P069)			
1	M85052/3-12	. CLAMP	1	A	PAOZZ
	M85052/3-17	. CLAMP	1	B	PAOZZ
	M85052/3-21	. CLAMP	1	C	PAOZZ
	NAS673V2	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
2	M85052/3-12	. CLAMP	1	A	PAOZZ
	M85052/3-17	. CLAMP	1	D	PAOZZ
	NAS673V2	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
3	M85052/3-12	. CLAMP	1	A	PAOZZ
	M85052/3-17	. CLAMP	1	D	PAOZZ
	NAS673V5	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
	NAS43HT3-16	. SPACER (AP)	1		PAOZZ
4	NAS674V5	. BOLT	2	E	PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 4)	2		PAOZZ
5	MS25083-7BC10	. LEAD, ELECTRICAL	1	E	PAOZZ
	MS16995-35	. SCREW (AP)	1		PAOZZ
6	AE83974T	. FUEL DUCT ASSEMBLY (00624)	1	E	PAOZZ
		(MCDONNELL SPEC 74-580105-101)			
7	74A586484-1009	. TUBE ASSEMBLY, METAL - FUEL DUMP,	1	E	PAOZZ
		Y495 TO VALVE (76301)			
	NAS674V4	. BOLT (AP)	2		PAOZZ
	AN960JD416L	. WASHER (AP)	2		PAOZZ
8	74A586448-1003	. ADAPTER, MOUNTING - FUEL DUMP	1		XBGG
		VALVE, TANK NO. 4 (76301)			
		(SUPERSEDES 74A586448-1001)			
9	125639-221	. VALVE, SUBASSEMBLY (FUEL DUMP	1		PAOZZ
		BUTTERFLY VALVE) (73760)			
		(MCDONNELL SPEC 74-580141-211)			
		(REPLACES 125639) (PART OF AV17B1238-111)			
	125639	. SEE ABOVE (73760) (MCDONNELL SPEC	1	G	PAOZZ
		74-580141-211) (USE UNTIL EXHAUSTED)			
		(PART OF AV17B1238-107)			
10	MS29513-230	. PACKING	2	E	PAOZZ
11	NAS674V4	. BOLT	6	E	PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 11)	6		PAOZZ
12	MS29513-230 Ø	. PACKING	3	F	PAOZZ
13	NAS674V3	. BOLT	2		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 13)	2		PAOZZ
14	74A586484-1007 Ø	. TUBE ASSEMBLY, METAL - FUEL DUMP,	1	F	PAOZZ
		Y495 TO VALVE (76301) (REPLACES			
		74A586484-1001)			
15	W901K40DE Ø	. COUPLING, CLAMP, GROOVED (79326)	2	F*	PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	14J12-40A Ø	. COUPLING, CLAMP, GROOVED (24984)	2	F*	PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
16	74A586484-1005 Ø	. TUBE ASSEMBLY, METAL - FUEL DUMP	1	F	PAOZZ
		Y495 TO VALVE (76301)			
		(TUBE ASSY LOWER)			
		(SUPERSEDES 74A586484-1001)			

Figure 1. Fuel Dump Valve (5B-P069) (Sheet 7)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
17	74A586482-1007 @	.	MANIFOLD, FLUID, FUEL TRANSFER, TANK						1	F	PAOZZ
			NO. 4 (76301) (REPLACES 74A586482-1005)								
18	MS29513-230	.	PACKING						3	F	PAOZZ
19	74A586484-1007 ¢	.	TUBE ASSEMBLY, METAL - FUEL DUMP, Y495 . . .						1	F	PAOZZ
			TO VALVE (76301) (SUPERSEDES								
			74A586484-1001 AND 74A586484-1005)								
	NAS673V3	.	BOLT (AP)						2		PAOZZ
	AN960JD416L	.	WASHER (AP)						2		PAOZZ
20	W901K40DE Ø	.	COUPLING, CLAMP, GROOVED (79326)						1	F*	PAOZZ
			(MCDONNELL SPEC 7M765-40D)								
			(INCLUDES SLEEVE)								
	14J12-40A Ø	.	SEE ABOVE (24984)						1	F*	PAOZZ
21	74A586482-1007 @	.	MANIFOLD, FLUID, AIRCRAFT FUEL						1		PAOZZ
			TRANSFER, TANK NO. 4 (76301)								
			(SUPERSEDES 74A586482-1003 AND								
			74A586482-1005)								
22	74A586467-1009	.	TUBE ASSEMBLY, METAL - MAIN VENT,						1		PAOZZ
			TANK NO. 4 (76301) (REPLACES								
			74A586467-1007)								
23	JM44LC33WD40	.	CLAMP (22175) (MCDONNELL SPEC						1		PAOZZ
			ST9M630D40)								
	NAS673V14	.	BOLT (AP)						1		PAOZZ
	AN960JD10L	.	WASHER (AP)						1		PAOZZ
	NAS43DD3-48	.	SPACER (AP)						1		PAOZZ
24	74A586429-1053	.	BRACKET ASSY (76301)						1		XBOOO
25	MS29513-230	.	PACKING						4		PAOZZ
26	W901K40DE	.	COUPLING, CLAMP, GROOVED (79326)						3	*	PAOZZ
			(MCDONNELL SPEC 7M765-40D)								
			(INCLUDES SLEEVE)								
	14J12-40A	.	SEE ABOVE (24984)						3	*	PAOZZ
27	MA11A1187-225	.	ACTUATOR, ELECTRO-MECHANICAL,						1		PAOZZ
			ROTARY (FUEL DUMP VALVE MOTOR								
			ASSEMBLY) (73760) (MCDONNELL SPEC								
			74-580141-225) (5B-P069) (REPLACES								
			MA11A1187-219) (PART AV17B1238-111)								
	MA11A1187-219	.	SEE ABOVE (73760) (MCDONNELL SPEC						1	*	PAOZZ
			74-580141-219) (5B-P069) (USE UNTIL								
			EXHAUSTED) (PART OF AV17B1238-107)								
	NAS674V6	.	BOLT (AP)						4		PAOZZ
	AN960JD416L	.	WASHER (AP)						4		PAOZZ
28	MS27467T11B35S	.	CONNECTOR, PLUG (5P-P069)						1		PAOZZ
29	MS29513-214	.	PACKING						1		PAOZZ
30	74A586447-2003	.	PLATE, ADAPTER - DUMP VALVE						1		MGOZZ
			MOUNTING (76301) (SUPERSEDES								
			74A586447-2001)								
31	NAS674V3	.	BOLT						4		PAOZZ
	AN960JD416L	.	WASHER (USE WITH INDEX 31)						4		PAOZZ
32	74A586485-1003	.	MANIFOLD, FLUID, AIRCRAFT - FUEL						1		XBOZZ
			DUMP, TANK NO. 4 (76301) (SUPERSEDES								
			74A586485-1001)								
33	MS29513-230	.	PACKING						2		PAOZZ
34	NAS673V1	.	BOLT						4		PAOZZ
	AN960JD416L	.	WASHER (USE WITH INDEX 34)						4		PAOZZ

Figure 1. Fuel Dump Valve (5B-P069) (Sheet 8)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
35	NAS673V2	.	BOLT	.....					2		PAOZZ
	AN960JD10L	.	WASHER (USE WITH INDEX 35)	.....					2		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

¢ THESE PARTS MAY BE REPLACED BY
PARTS CODED WITH SYMBOL Ø.

Ø PARTS WITH THIS SYMBOL, WHEN
USED TOGETHER, REPLACE PARTS
WITH SYMBOL ¢ PARTS CODED WITH
SYMBOL ¢ SHALL NOT BE USED TO
REPLACE PARTS WITH SYMBOL Ø.

@ REFER TO WP028 00 FOR CONFIGURATION
CHANGES TO MANIFOLD AND ASSOCIATED
TUBING

CODE	USABLE ON	MODEL
A	161353 THRU 161528	F/A-18A/B
B	161702 & UP	F/A-18A
C	161704 & UP	F/A-18A/B
D	161702 & UP	F/A-18A/B
E	161983 AND UP; ALSO 161353 THRU 161982 AFTER F/A-18 IAFC 017 PART 1 AND PART 2	F/A-18A/B
F	161353 THRU 161982 BEFORE F/A-18 IAFC 017 PART 1 AND PART 2	F/A-18A/B
G	161353 THRU 162414	F/A-18A/B

Figure 1. Fuel Dump Valve (5B-P069) (Sheet 9)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
DUMP LINE AUTOMATIC DRAIN VALVE (5VAS518)
FUEL DUMP SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Vent Tank Access Cover	WP009 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00

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Subject	Page No.
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Removal	1

Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (2)	MS29513-117
Packing (2)	M25988/1-312
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

a. Do a general preparation for removal (WP013 00).

b. Remove coupling (2, figure 1), and packings (3).

c. Remove packings (5), valve (4) and attaching parts.

2. INSTALLATION.

a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate all new packings with petrolatum.

- c. Install valve (4, figure 1), coupling (2), packings (3 and 5) and attaching parts.

- d. Install access cover (WP009 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

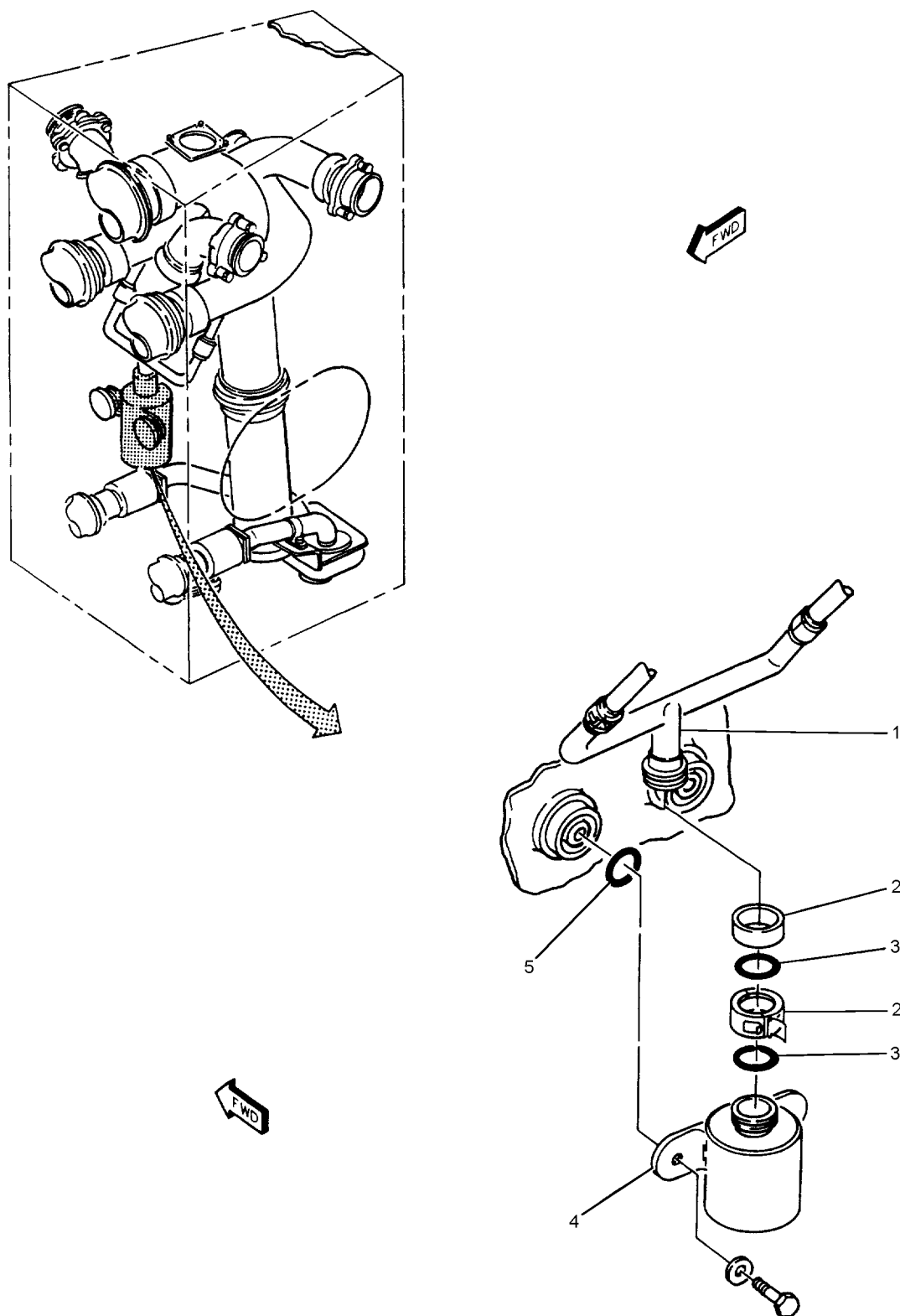


Figure 1. Dump Line Automatic Drain Valve (5VAS518) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		DUMP LINE AUTOMATIC DRAIN VALVE			
		(5VAS518)			
1	74A586523-1007	. MANIFOLD, FLUID, AIRCRAFT - FUEL	1		XBOZZ
		DUMP LINE. PRESS RLF V (76301)			
		(SUPERSEDES 74A586523-1003)			
2	W901K12DE	. COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-12D)			
		(INCLUDES SLEEVE)			
	14J12-12A	. COUPLING, CLAMP, GROOVED (24984)	1		PAOZZ
		(MCDONNELL SPEC 7M765-12D)			
		(INCLUDES SLEEVE)			
	W901F12DE	. COUPLING, CLAMP, GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M550-12D)			
		(INCLUDES SLEEVE)			
3	MS29513-117	. PACKING	2		PAOZZ
4	925V100	. VALVE, TANK PUMP LINEAR - DRAIN	1		PAOZZ
		PRESS OPR, VENT TANK, DUMP,			
		(DUMP LINE AUTOMATIC DRAIN VALVE)			
		(00672) (MCDONNELL SPEC 74J588007-101)			
		(5VAS518)			
	NAS674V2	. BOLT (AP)	2		PAOZZ
	AN960JD416L	. WASHER (AP)	2		PAOZZ
5	M2598811-312	. PACKING	2		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

Figure 1. Dump Line Automatic Drain Valve (5VAS518) (Sheet 2)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

DUMP LINE FLAME ARRESTOR (5MPS502 OR 5MPT503)

FUEL DUMP SYSTEM

Reference Material

Structural Hardware NAVAIR 01-1A-8

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Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required (Cont)

Materials Required		Nomenclature	Specification or Part Number
		Sealing Compound	MIL-S-8802, Class A 1/2 (CAGE 81349)

Nomenclature	Specification or Part Number
--------------	---------------------------------

1. REMOVAL.

NOTE

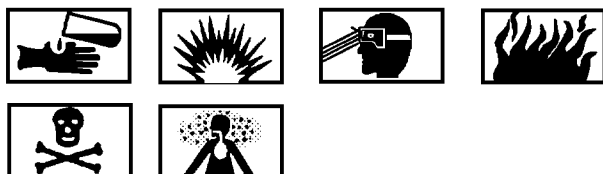
Cheesecloth	301 (CAGE 97327)
Cleaning Compound	MIL-C-38736 (CAGE 81349)
Machined Rivet (2)	74A230748-2021

This procedure is written for left or right
dumpline flame arrestor.a. Remove rivets (2, figure 1) from duct and ar-
restor (1) per NAVAIR 01-1A-8.

b. Remove arrestor (1) from duct.

c. Remove sealing compound from surfaces of duct, if required.

2. INSTALLATION.



Cleaning Compound

8

a. Clean duct with cleaning compound MIL-C-38736 to remove any contaminants, if present.

b. Install arrestor (1) in duct until holes in flame arrestor (1) align with holes in duct.



To prevent damage to arrestor (1) and duct, hand squeeze rivets (2).

c. Using hand squeezer, install rivets (2) in duct and arrestor (1) per NAVAIR 01-1A-8.



Sealing Compound

3

d. Seal periphery of flame arrestor (1) and structure as shown in view A with sealing compound MIL-S-8802.

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

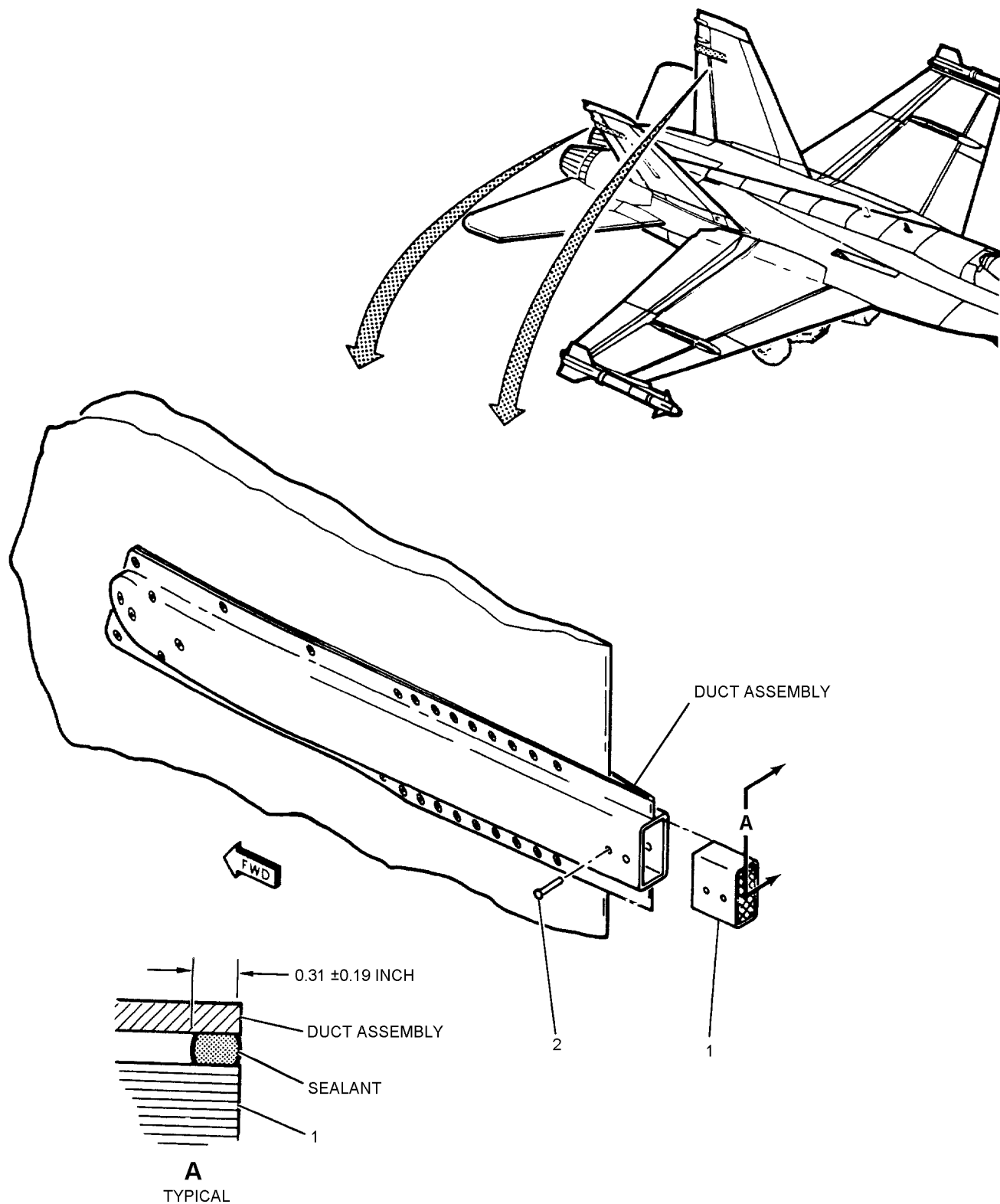


Figure 1. Dumpline Flame Arrestor (5MPS502 or 5MPT503) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		DUMPLINE FLAME ARRESTOR (5MPS502 OR 5MPT503)									
1	2408403-103	.	ARRESTOR, FLAME - FUEL (DUMPLINE	.....					1	*	PAOZZ
			FLAME ARRESTOR) (98769)								
			(MCDONNELL SPEC 74-580140-103)								
			(5MPS502 OR 5MPT503)								
	AF86-3996	.	SEE ABOVE (99321)						1	*	PAOZZ
2	74A230748-2039	.	RIVET, SOLID (AP) (76301) (REPLACES	.....					2		PAOZZ
			74A230748-2021)								
	74A230748-2021	.	SEE ABOVE (USE UNTIL EXHAUSTED)	.....					2		PAOZZ
		* ALTERNATE OR EQUIVALENT PARTS. (WP002 00)									

Figure 1. Dumpline Flame Arrestor (5MPS502 or 5MPT503) (Sheet 2)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

HOT FUEL RECIRCULATION CHECK VALVE (5VAP585 OR 5VAR584)

HOT FUEL RECIRCULATION SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Aft Access Cover and Tank Entry Procedure	WP008 00
Fuselage Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-200
Hot Fuel Recirculation System Test	WP015 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Plane Captain Manual	A1-F18AC-PCM-000

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Illustrated Parts Breakdown	3
Installation	2
Removal	2

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 83	-

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC32 (CAGE 96906)
Packing (2)	MS29513-117
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Do no. 4 fuel tank aft access cover and tank entry procedure removal (WP008 00).
- c. Disconnect tube (1, figure 1).
- d. Remove coupling (4), valve (2), and packings (3).

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings with petrolatum.
- c. Install packings (3, figure 1), coupling (4), and valve (2).
- d. Connect tube (1) to valve (2).
- e. Do no. 4 fuel tank aft access cover and tank entry procedure installation (WP008 00).
- f. Do hot fuel recirculation check valve leak test per paragraph 3.

- g. Do hot fuel recirculation system test (A1-F18AC-460-200, WP015 00).

3. HOT FUEL RECIRCULATION CHECK VALVE LEAK TEST. (QA)

- a. Refuel aircraft (A1-F18AC-PCM-000).
- b. On ELEC power control panel, set BATT switch to ON (figure 2).
- c. On LH and RH advisory and threat warning indicator panel, push L and R engine FIRE warning light.
- d. In L and R MLG wheelwell, visually inspect to make sure both engine fuel shutoff valve manual override arms are in the CLOSED (-) position.
- e. Remove doors 53L and 53R (A1-F18AC-LMM-010).
- f. Position an approved safety container below each cap (3, sheet 3) to catch residual fuel when cap is removed.
- g. Rotate caps (3) and tubes away from structure, left and right side.

WARNING

To prevent personal injury, do not stand directly under caps when draining residual fuel.

- h. Remove both caps (3) and drain residual fuel (approximately 2 gallons from each side).
- i. Record leakage rate for one minute.
- j. The maximum allowable leakage rate is 300cc.

CAUTION

To prevent damage to tubes above caps, make sure caps (3) point down.

- k. Rotate caps (3) and tubes so that caps (3) point down on left and right sides.
- l. Install both caps (3) and safety with lockwire if safetying holes exist. (QA)

m. Install doors 53L and 53R (A1-F18AC-LMM-010).

n. On LH and RH advisory and threat warning indicator panel, release L and R fuel FIRE warning light.

o. In L and R MLG wheelwell, visually inspect to make sure both engine fuel shutoff valve manual override arms are in the OPEN (+) position.



To prevent damage to battery bus contactors and/or batteries, be sure BATT switch is set to OFF and BATT SW caution light is OFF.

p. On ELEC power control panel, set BATT switch to OFF, BATT SW caution light goes on.

4. ILLUSTRATED PARTS BREAKDOWN.

5. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

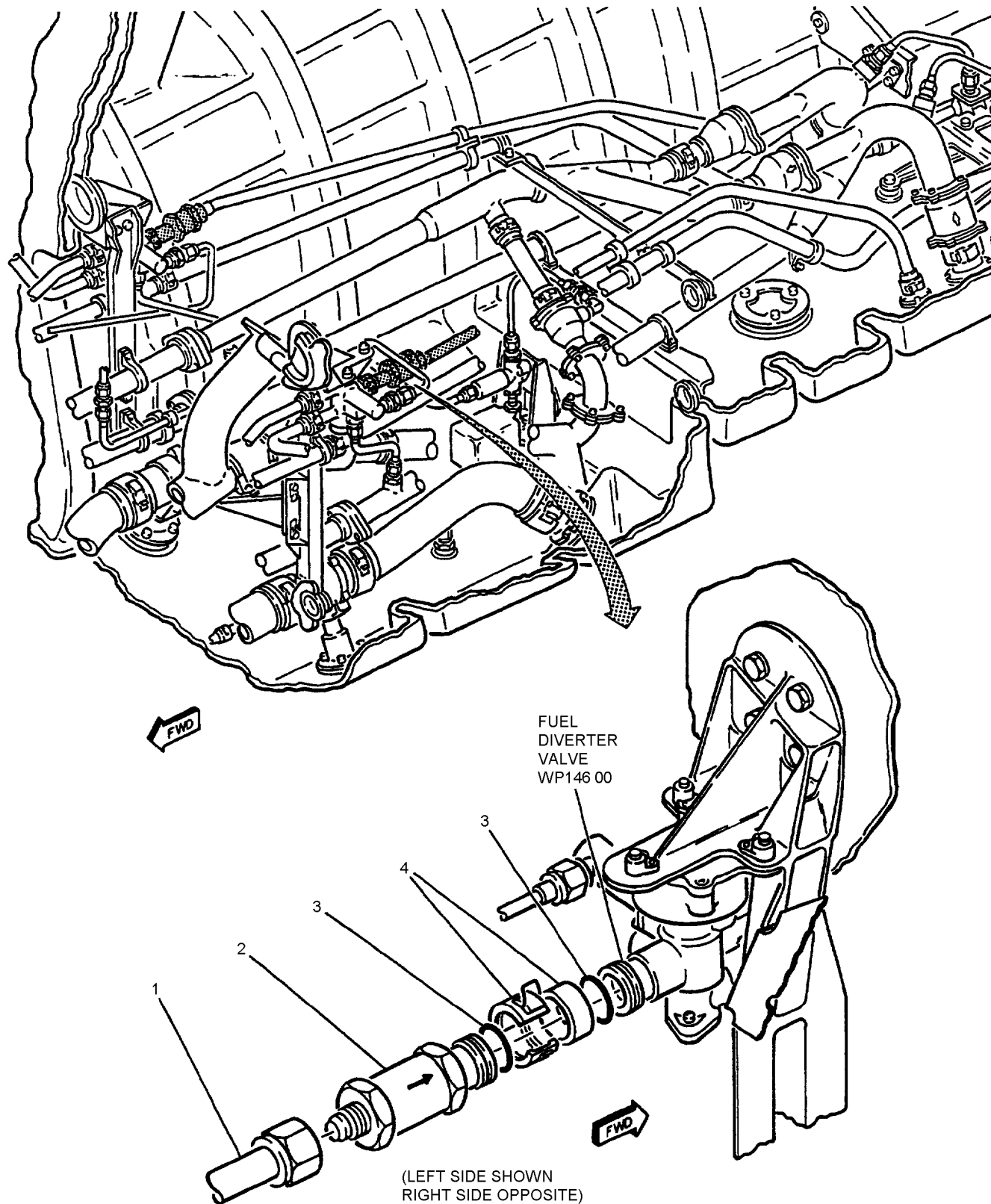


Figure 1. Hot Fuel Recirculation Check Valve (5VAP585 or 5VAR584) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		HOT FUEL RECIRCULATION CHECK VALVE									
		(5VAP585 OR 5VAR584)									
1	74A586866-1015	.	TUBE ASSEMBLY, METAL - LH, HOT	.	.	.	.	.	1		XBOZZ
			FUEL RECIRC, DTV V TO Y537								
			(76301) (SUPERSEDES 74A586866-1005,								
			74A5B6866-1007, 74A586366-1009 OR								
			74A586866-1011)								
	74A586867-1011	.	TUBE ASSEMBLY, METAL - RH, HOT	.	.	.	.	.	1		XBOZZ
			FUEL RECIRC, DTV V TO Y537								
			(76301) (SUPERSEDES 74A586867-1005,								
			74A586867-1007, AND 74A586867-1009)								
2	2S2716	.	VALVE, CHECK - FUEL, SMALL LINE	.	.	.	.	.	1		PAOZZ
			MOUNTED (HOT FUEL RECIRCULATION								
			CHECK VALVE) (MCDONNELL SPEC								
			74-580125-105) (5VAP585 OR 5VAR584)								
3	MS29513-117	.	PACKING . . . . .	.	.	.	.	.	2		PAOZZ
4	W901K12DE	.	COUPLING, CLAMP, GROOVED (79326)	.	.	.	.	.	1		PAOZZ
			(MCDONNELL SPEC 7M765-12D)								
			(INCLUDES SLEEVE)								
	14J12-12A	.	COUPLING, CLAMP, GROOVED (24984)	.	.	.	.	.	1		PAOZZ
			(MCDONNELL SPEC 7M765-12D)								
			(INCLUDES SLEEVE)								
	W901F12DE	.	COUPLING, CLAMP, GROOVED (79326)	.	.	.	.	.	1	*	PAOZZ
			(MCDONNELL SPEC 7M550-12D)								
			(INCLUDES SLEEVE)								

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

Figure 1. Hot Fuel Recirculation Check Valve (5VAP585 or 5VAR584) (Sheet 2)

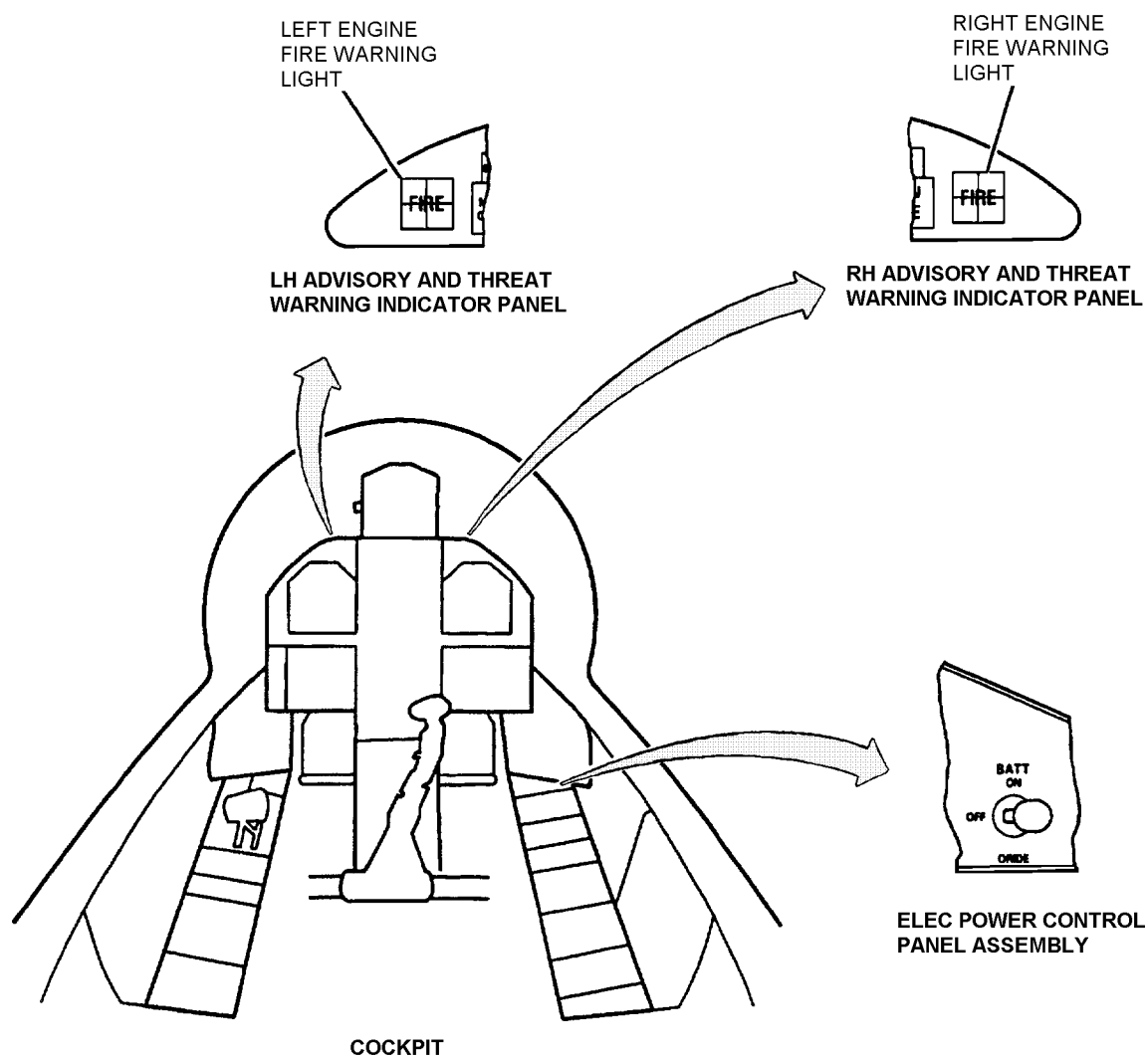


Figure 2. Hot Fuel Recirculation Check Valve Leak Test (Sheet 1)

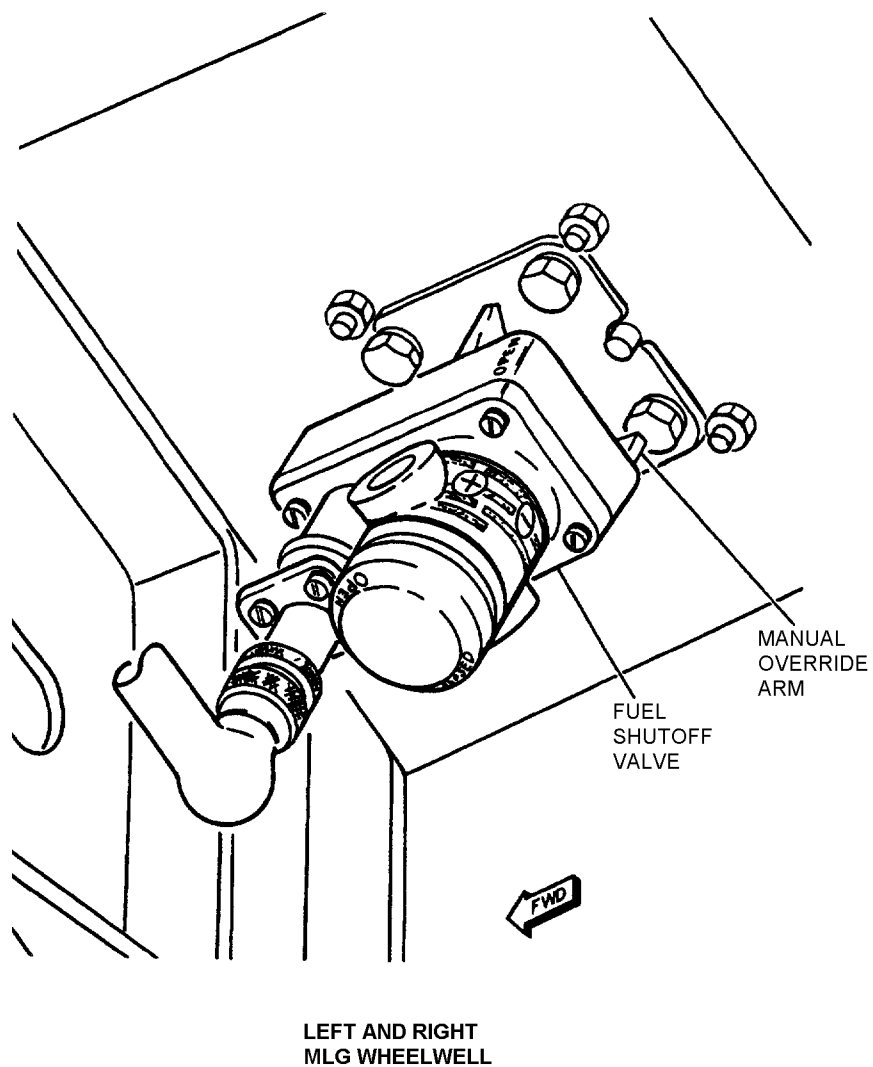


Figure 2. Hot Fuel Recirculation Check Valve Leak Test (Sheet 2)

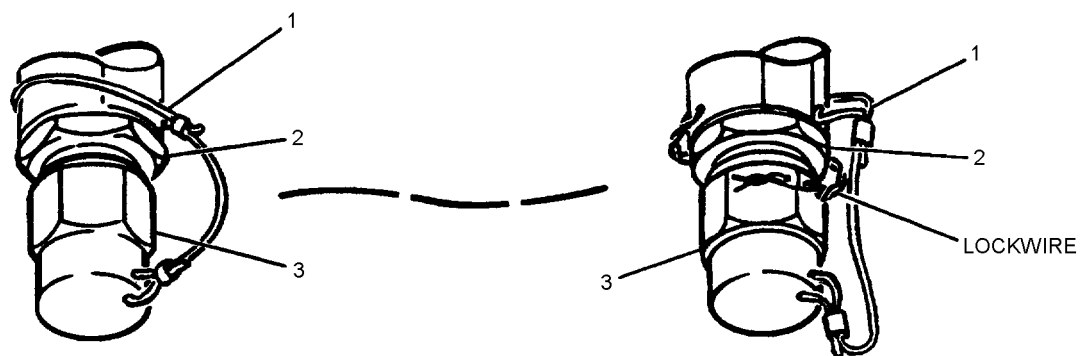
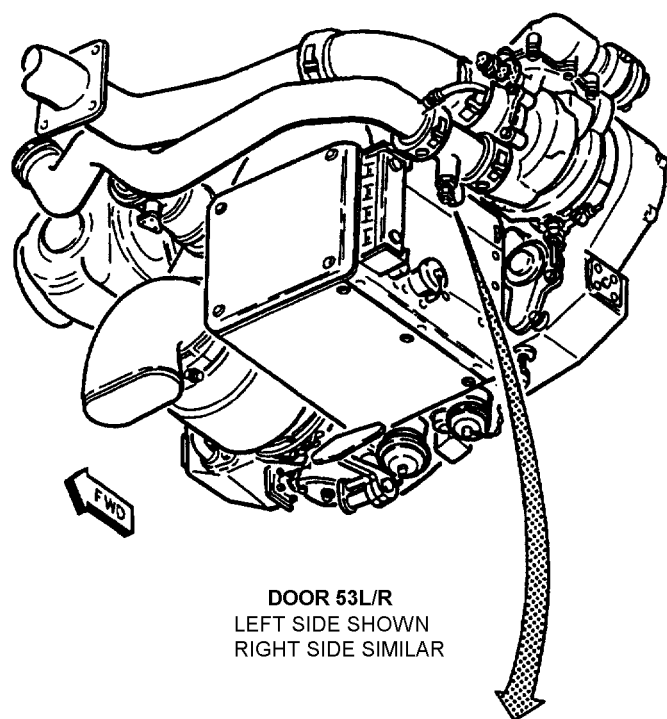


Figure 2. Hot Fuel Recirculation Check Valve Leak Test (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		HOT FUEL RECIRCULATION CHECK VALVE									
		LEAK TEST									
1	9M59-2-140P +	.							1		MGOZZ
	9M59-2-400P ++	.							1		MGOZZ
	51893	.							2		PAOZZ
		(MCDONNELL SPEC 9M306-6)									
		(USE WITH INDEX 1)									
2	AN815-10J	.							1		PAOZZ
	M25988/1-910	.							1		PAOZZ
3	74A587050-2001 ¢	.							1		XBOZZ
		TUBE									
	AN929A10J	.							1	*	PAOZZ
		CAP (INCLUDES AN818L10J NUT)									

¢ MADE FROM AN929A110J.

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

+ USE WITH 74A586991-1005 TUBE.

++USE WITH 74A586991-1007 AND
74A587010-1001 TUBES.

Figure 2. Hot Fuel Recirculation Check Valve Leak Test (Sheet 4)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****FUEL SYSTEM RESTRICTORS****FUEL STORAGE SYSTEM**

Reference Material

Fuel System	A1-F18AC-460-300
No. 2 Fuel Tank Access Cover	WP005 00
No. 4 Fuel Tank Forward Access Cover	WP007 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-310
No. 1 Fuel Tank Cavity Bulkhead Fittings and Supports	WP040 00
No. 3 Fuel Tank Cavity Bulkhead Fittings and Supports	WP042 00
No. 4 Fuel Tank Cavity Bulkhead Fittings and Supports	WP043 00
Fuel System	A1-F18AC-460-320
No. 1 Fuel Tank Fuel Level Control Shutoff Valve and High Level Pilot Valve	WP057 00
No. 2 Fuel Tank Fuel Level Control Shutoff Valve and High Level Pilot Valve	WP058 00
No. 3 Fuel Tank Fuel Level Control Shutoff Valve and High Level Pilot Valve	WP059 00
No. 2 Fuel Tank Gravity Feed Check Valve	WP111 00
Fuel System	A1-F18AC-460-330
No. 3 Fuel Tank Gravity Feed Check Valve	WP115 00
Fuel System	A1-F18AC-460-200
Internal Fuel Transfer and Engine Fuel Supply System Test	WP012 00
Hot Fuel Recirculation Test	WP015 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captain Manual	A1-F18AC-PCM-000

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No. 2 Fuel Tank Fuel Level Control Shutoff Valve Restrictor (5RAP662)	3
No. 2 Fuel Tank Fuel Level Sensor Tube Restrictor (5RAP667)	7
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Installation	4
Removal	4

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 18	-	Incorporation of Fuel Turbine Boost Pump/ Sealing of Raised Baffle in Fuel Tanks 2 and 3 (ECP MDA-F/A-18-00077C1/C2)	15 Jul 86	-
F/A-18 AFC 21	-	Addition of Fuel/Air Heat Exchanger (ECP MDA-F/A-18-00033)	15 Jul 86	-
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 83	-
F/A-18 AFC 39	-	No. 1 Fuel Tank Interconnect Valve Replace- ment and Fuel Sequencing Modification (ECP MDA-F/A-18-00072C1)	15 Oct 86	-
F/A-18 AFC 43	30 Sep 86	Replacement of 7M404/7M550 Fuel Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 86	-
F/A-18 AFC 53	-	Elimination of Tanks 1 and 4 Sneak Circuit, Tank 4 Motive Flow Shut Off Valve, and Raised Inverted Baffle (ECP MDA-F/ A-18-00055/C1)	15 Jul 86	-

1. NO. 1 AND NO. 2 FUEL TANK INTERCONNECT VALVE RESTRICTOR (5VAP538).

a. On 161353 THRU 161715, remove and install restrictor (2, figure 1) (WP040 00).

b. On 161716 AND UP, remove and install no. 2 fuel tank gravity feed check valve (WP111 00).

2. NO. 2 AND NO. 3 FUEL TANK INTERCONNECT VALVE RESTRICTOR (5RAP665).

a. Remove and install restrictor (1, figure 1, sheet 4) (WP042 00).

3. NO. 3 AND NO. 4 FUEL TANK INTERCONNECT VALVE RESTRICTOR (5VAP608).

a. On 161353 THRU 161715, remove and install restrictor (3, figure 1, sheet 5) (WP043 00).

b. On 161716 AND UP, remove and install no. 3 fuel tank gravity feed check valve (WP115 00).

4. NO. 1 FUEL TANK FUEL LEVEL CONTROL SHUTOFF VALVE RESTRICTOR (5RAP661).

a. Remove and install (WP057 00).

5. NO. 2 FUEL TANK FUEL LEVEL CONTROL SHUTOFF VALVE RESTRICTOR (5RAP662).

a. Remove and install (WP058 00).

6. NO. 3 FUEL TANK FUEL LEVEL CONTROL SHUTOFF VALVE RESTRICTOR (5RAP663).

a. Remove and install (WP059 00).

7. NO. 2 FUEL TANK FUEL TRANSFER RESTRICTOR (5RAP659) - 161353 THRU 161519.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packings (4)	MS29513-218
Petrolatum, Technical	VV-P-236 (CAGE 81348)

8. REMOVAL.

a. Do general preparation for removal (WP013 00).

b. Remove clamps (5, figure 2), bolts (6 and 7), and attaching parts.

c. Remove clamps (3 and 10) and attaching parts.

d. Remove couplings (2), tube (4), with restrictor, packings (1), and restrictor (8).

9. INSTALLATION.

a. Do general preparation for component installation (WP013 00).



Petrolatum

1

b. Lubricate new packings with petrolatum.

c. Install packings (1, figure 2).

d. Position tube (4) and restrictor (8) and install couplings (2).

e. Prepare bolts (6 and 7) and attaching parts for electrical bond (A1-F18AC-LMM-000).

f. Install clamps (5), bolts (6 and 7), and attaching parts.

g. Install clamps (3 and 10), and attaching parts.

h. Inspect area inside tank for and remove foreign objects. (QA)

i. Install no. 2 fuel tank access cover (WP005 00).

j. Connect utility and emergency battery connectors (WP013 00).

k. Refuel aircraft (A1-F18AC-PCM-000) and do internal fuel transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

10. NO. 4 FUEL TANK FUEL TRANSFER RESTRICTOR (5RAP660).

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packings	MS29512-06
Packings (4)	MS29513-218
Packings (2)	MS29513-224
Packings (8)	MS29513-230
Petrolatum, Technical	VV-P-236 (CAGE 81348)

11. REMOVAL.

a. Do general preparation for removal (WP013 00).

b. Remove no. 4 fuel tank forward access cover (WP007 00).

c. Remove bolts and washers from bracket (1, figure 3, detail A).

d. Remove coupling (4), tube (2), bracket (1), and attaching parts.

e. Remove couplings (4, detail B), packings (3) and manifold (5).

f. On 161353 THRU 161941, do substeps below:

(1) Remove coupling (20, detail C).

(2) Disconnect tube (9) at elbow (10).

(3) Remove bolts (8 and 15) and attaching parts at valve (7) and bracket (16) and remove manifold (17) with valve (11).

(4) Remove bolts (8), valve (11), and attaching parts.

(5) Remove check valve (14).

(6) Remove packings (12, 13 and 19).

g. On 161942 AND UP, remove couplings (20), packings (19), and manifold (22) from tube (21).

12. INSTALLATION.

a. Do general preparation for component installation (WP013 00).



Petrolatum

1

b. Lubricate new packings with petrolatum.

c. On 161353 THRU 161941, do substeps below:

(1) Prepare mating surfaces of manifold (17, figure 3, detail C), valve (11), bolt (8), and attaching parts for electrical bond (A1-F18AC-LMM-000).

(2) Install packings (12 and 13), valves (11 and 14), bolts (8), and attaching parts.

(3) Prepare mating surface of manifold (17), bracket (16), valve (7), bolts (8 and 15), and attaching parts for electrical bond (A1-F18AC-LMM-000).

(4) Install packings (12 and 19).

(5) Position manifold (17) to valve (7) and install bolts (8 and 16) and attaching parts.

(6) Install coupling (20).

(7) Connect tube (9) to elbow (10).

d. On 161942 AND UP, install manifold (22), packings (19) and coupling (20) to tube (21).

e. Inspect fuel tank area for and remove foreign objects. (QA)

f. Install packings (3, detail B) and manifold (5) with coupling (4).

g. Install packings (3, detail A), bracket (1) and tube (2) with coupling (4) and attaching parts.

h. Install no. 4 fuel tank forward access cover (WP007 00).

i. Connect utility and emergency battery connectors (WP013 00).

j. Do internal transfer and engine fuel supply system test (A1-F18AC-460-200, WP012 00).

13. HOT FUEL RECIRCULATION AMAD BAY RESTRICTORS (5RAP655 OR 5RAR656).

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC32 (CAGE 96906)
Packing (3)	M25988/1-015
Petrolatum, Technical	VV-P-236 (CAGE 81348)

14. REMOVAL.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).

b. Tag aircraft external power receptacle with an applicable warning to indicate external power is not applied to the aircraft.

c. Open door 10R (A1-F18AC-LMM-010).

d. On no. 5 circuit breaker panel assembly (figure 1, sheet 1), open F EXT circuit breaker.

e. Apply battery power (A1-F18AC-LMM-000).

f. On LH and RH advisory and threat warning indicator panel, push L and R engine FIRE warning light.

g. Remove battery power (A1-F18AC-LMM-000).

h. On no. 5 circuit breaker panel assembly, open L and R FUEL S/O valve circuit breakers.

i. In left and right MLG wheelwell, on fuel shut-off valve (figure 1), make sure manual override arm is in the CLOSED (-) position. (sheet 2)

j. Open door 53L or 53R, as applicable (A1-F18AC-LMM-010).

k. Position an approved safety container under tube (5, sheet 6 or 13, sheet 7) to catch residual fuel.



Jet Fuel



7

WARNING

To prevent personal injury, do not stand directly below tube when removing cap.

l. Remove cap (4) and drain residual fuel.

m. On left side, remove couplings (7 and 10, sheet 6) (WP013 00) and remove tube (5) with restrictor.

n. On right side, remove couplings (7 and 10, sheet 7) (WP013 00) and remove tube (13) with restrictor.

15. INSTALLATION.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).



Petrolatum

1

b. Lubricate new packings with petrolatum.

c. On left side, do substeps below:

- (1) Install packings (6, figure 1, sheet 6).

WARNING

To prevent a possible fire and/or explosion, make sure corrosion resistant steel couplings are used in high heat areas (AMAD and engine bays). Both the outer clamp and inner sleeve will have a silver-grey color.

- (2) Position tube (5). Inspect, install, and lockwire couplings (7 and 10) (WP013 00). (QA)

- d. On right side, do substeps below:

- (1) Install packings (6, figure 1, sheet 7).

WARNING

To prevent a possible fire and/or explosion, make sure corrosion resistant steel couplings are used in high heat areas (AMAD and engine bays). Both the outer clamp and inner sleeve will have a silver-grey color.

- (2) Position tube (13). Inspect, install, and lockwire couplings (7 and 10) (WP013 00). (QA)

- e. Install cap (4).

- f. Install door 53L or 53R (A1-F18AC-LMM-010).

- g. On no. 5 circuit breaker panel assembly, close L and R FUEL S/O VALVE circuit breakers (sheet 1).

- h. Remove no power tag from external electrical receptacle.

- i. Apply battery power (A1-F18AC-LMM-000).

- j. On LH and RH advisory and threat warning indicator panel, push L and R FIRE warning lights.

- k. Remove battery power (A1-F18AC-LMM-000).

- l. On no. 5 circuit breaker panel assembly, close F EXT circuit breaker.

- m. Close door 10R (A1-F18AC-LMM-010).

- n. Do fuel leak test (A1-F18AC-LMM-000).

- o. Do hot fuel recirculation test (A1-F18AC-460-200, WP015 00).

16. HOT FUEL RECIRCULATION WING RESTRICTORS (5RAP657 OR 5RAR658) 161353 THRU 161519 BEFORE F/A-18 AFC 21.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29512-12
Petrolatum, Technical	VV-P-236 (CAGE 81348)

17. REMOVAL.

NOTE

Procedure is for left or right restrictor.

- a. Defuel aircraft (A1-F18AC-PCM-000).

- b. Make sure electrical power is not applied (A1-F18AC-LMM-000).

- c. Tag aircraft external power receptacle with an applicable warning to indicate external power is not to be applied to the aircraft.

- d. Remove door 41L or 41R as applicable (A1-F18AC-LMM-010).

- e. Working through door 41L or 41R, disconnect tube (14, figure 1, sheet 8) from elbow (15).

- f. Remove elbow (15).

- g. Remove restrictor (16).

- h. Remove packing (17).

- i. Cover door 41L or 41R door opening to prevent contamination.

18. INSTALLATION.

- a. Uncover door 41L or 41R opening.



Petrolatum

1

- b. Lubricate new packing (17, figure 1, sheet 8) with petrolatum.
- c. Install packing (17) on restrictor (16).
- d. Install restrictor (16).
- e. Install elbow (15) on restrictor (16).
- f. Connect tube (14) to elbow (15).
- g. Inspect for and remove foreign objects in door 41L or 41R area. (QA)
- h. Remove no power tag from external power receptacle.
- i. Refuel aircraft (A1-F18AC-PCM-000).
- j. Do fuel leak test (A1-F18AC-LMM-000).
- k. Install door 41L or 41R as applicable (A1-F18AC-LMM-010).
- l. Do hot fuel recirculation test. (A1-F18AC-460-200, WP015 00).

19. NO. 2 FUEL TANK FUEL LEVEL SENSOR TUBE RESTRICTOR (5RAP667).

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing	M29588/1-312
Petrolatum, Technical	VV-P-236 (CAGE 81348)

20. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove bolts (1, figure 4, detail A), probe guide (2), and attaching parts.
- c. On 161716 AND UP, do substeps below:
- (1) Disconnect tube (7, detail B) at fuel sensor and tee (6).
 - (2) Remove bolt (11), clamps (10), retainer (8), tube (7), packing (9), and attaching parts.
- d. On 161353 THRU 161715, do substeps below:
- (1) Disconnect tube (7, configuration X) at fuel level sensor and nipple (13).
 - (2) Remove clamps (12) and attaching parts.
 - (3) Remove bolt (15), clamps (10), retainer (8), tube (7) and attaching parts.
- e. Remove packing (9).

21. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate packing (9, figure 4, detail B) with petrolatum.
- c. On 161716 AND UP, do substeps below:



To prevent damage to fuel level sensor, hold sensor with wrench while torquing tube to sensor.

- (1) Position and connect tube (7, detail B) at fuel level sensor and tee (6). Hold sensor with wrench while torquing tube (7) to sensor.

(2) Install packing (9), retainer (8), clamps (10), bolt (11) and attaching parts.

d. On 161353 THRU 161715, do substeps below.



To prevent damage to fuel level sensor, hold sensor with wrench while torquing tube to sensor.

(1) Position and connect tube (7, configuration X) at fuel level sensor and nipple (13). Hold sensor with wrench while torquing tube (7) to sensor.

(2) Install packing (9), retainer (8), clamps (10), bolt (15), and attaching parts.

(3) Install clamps (12) and attaching parts.

e. Install probe guide (2, detail A), bolts (1), and attaching parts.

f. Install no. 2 fuel tank access cover (WP005 00).

g. Connect utility and emergency battery connectors (WP013 00).

h. Do internal fuel transfer, engine feed and dump system test (A1-F18AC-460-200, WP012 00).

22. NO. 3 FUEL TANK FUEL LEVEL SENSOR TUBE RESTRICTOR (5RAP668).

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (2)	MS29513-230
Petrolatum, Technical	VV-P-236 (CAGE 81348)

23. REMOVAL.

a. Do general preparation for removal (WP013 00).

b. Remove tube (1, figure 5, detail A), coupling (3), and packings (2).

c. Remove bolts (5, detail B), probe guide (6), and attaching parts.

d. On 161716 AND UP, do substeps below:

(1) Disconnect clamps (8, detail C).

(2) Disconnect tube (7) at fuel level sensor and nipple (9) and remove tube (7).

e. On 161353 THRU 161715, do substeps below:

(1) Disconnect clamps (10, configuration X).

(2) Disconnect and remove tube (7) from fuel level sensor and elbow (9).

24. INSTALLATION.

a. Do general preparation for component installation (WP013 00).

b. On 161716 AND UP, do substeps below:



To prevent damage to fuel level sensor, hold sensor with wrench while torquing tube to sensor.

(1) Position and connect tube (7, figure 5, detail C) to fuel level sensor and nipple (9). Hold sensor with wrench while torquing tube (7) to sensor.

(2) Connect clamps (8) with attaching parts.

c. On 161353 THRU 161715, do substeps below:



To prevent damage to fuel level sensor, hold sensor with wrench while torquing tube to sensor.

(1) Position and connect tube (7, figure 5, configuration X) to fuel level sensor and nipple (9). Hold sensor with wrench while torquing tube L (7) to sensor.

(2) Connect clamps (10) with attaching parts.

d. Install probe guide (6, detail B), bolts (5), and attaching parts.



Petrolatum

1

e. Lubricate packings with petrolatum.

f. Install packings (2, detail A).

g. Position tube (1) and install coupling (3).

h. Inspect for and remove any foreign objects from fuel tank area. (QA)

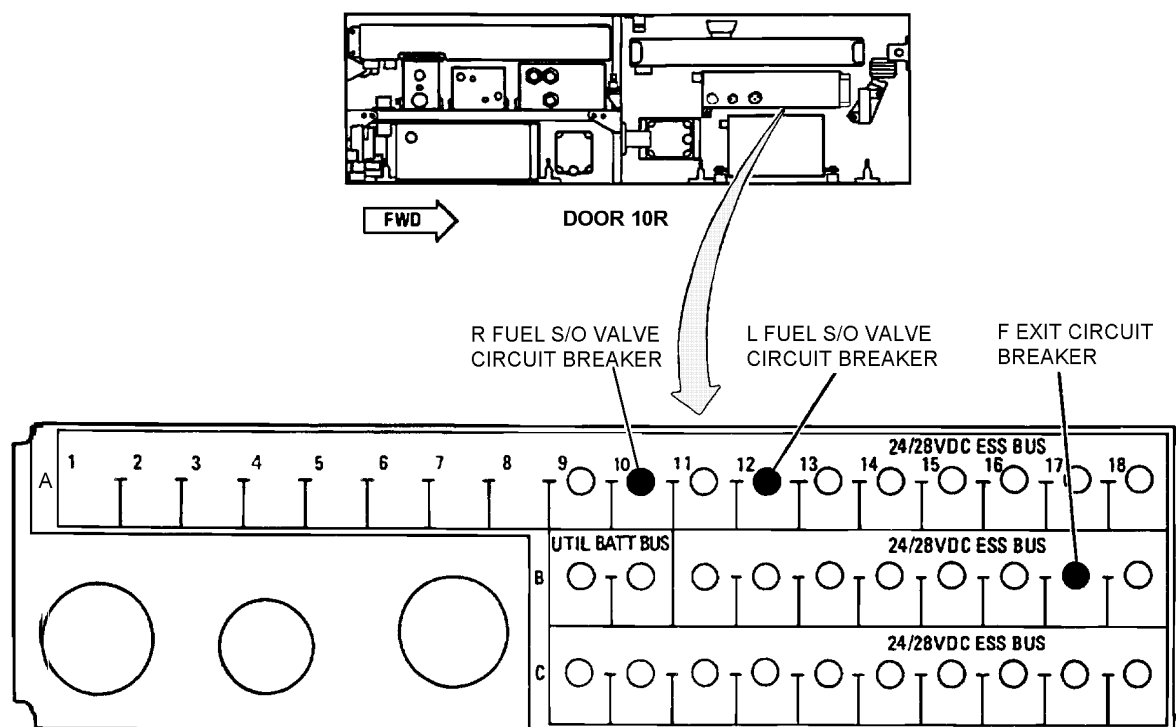
i. Install no. 3 fuel tank access cover (WP006 00).

j. Connect utility and emergency battery connectors (WP013 00).

k. Do internal fuel transfer, engine supply and dump system test (A1-F18AC-460-200, WP012 00).

25. ILLUSTRATED PARTS BREAKDOWN.

26. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.



52A-D092 NO. 5 CIRCUIT BREAKER PANEL ASSEMBLY

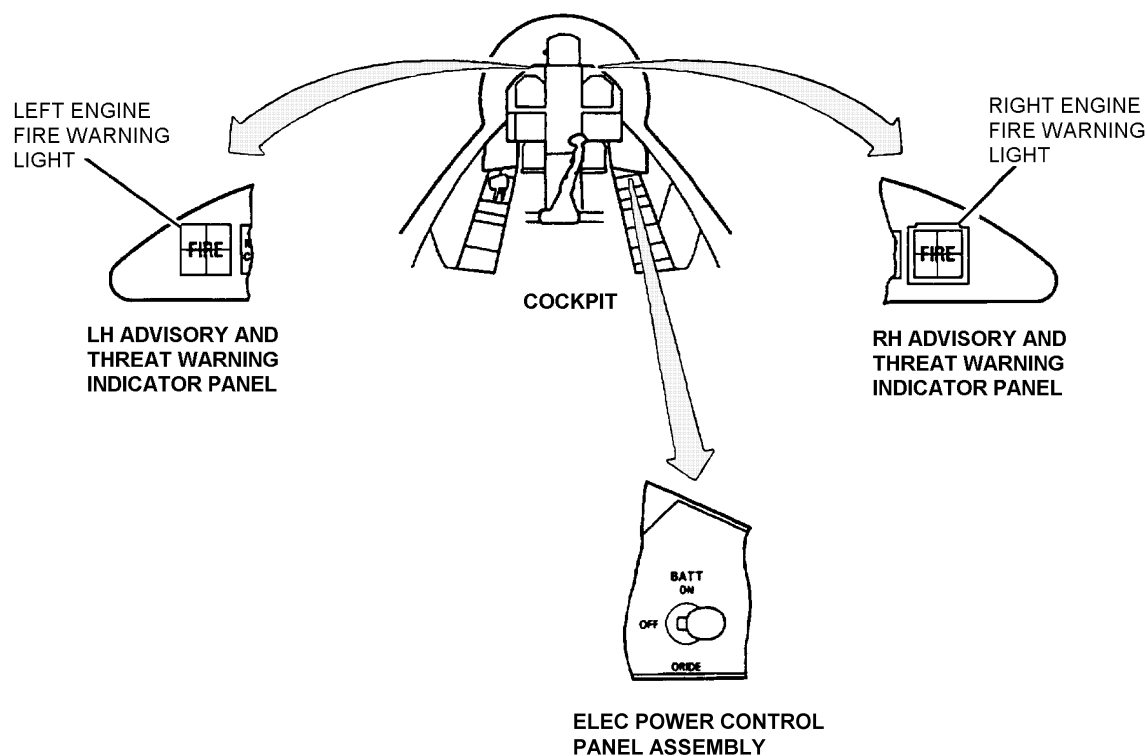


Figure 1. Restrictors (Sheet 1)

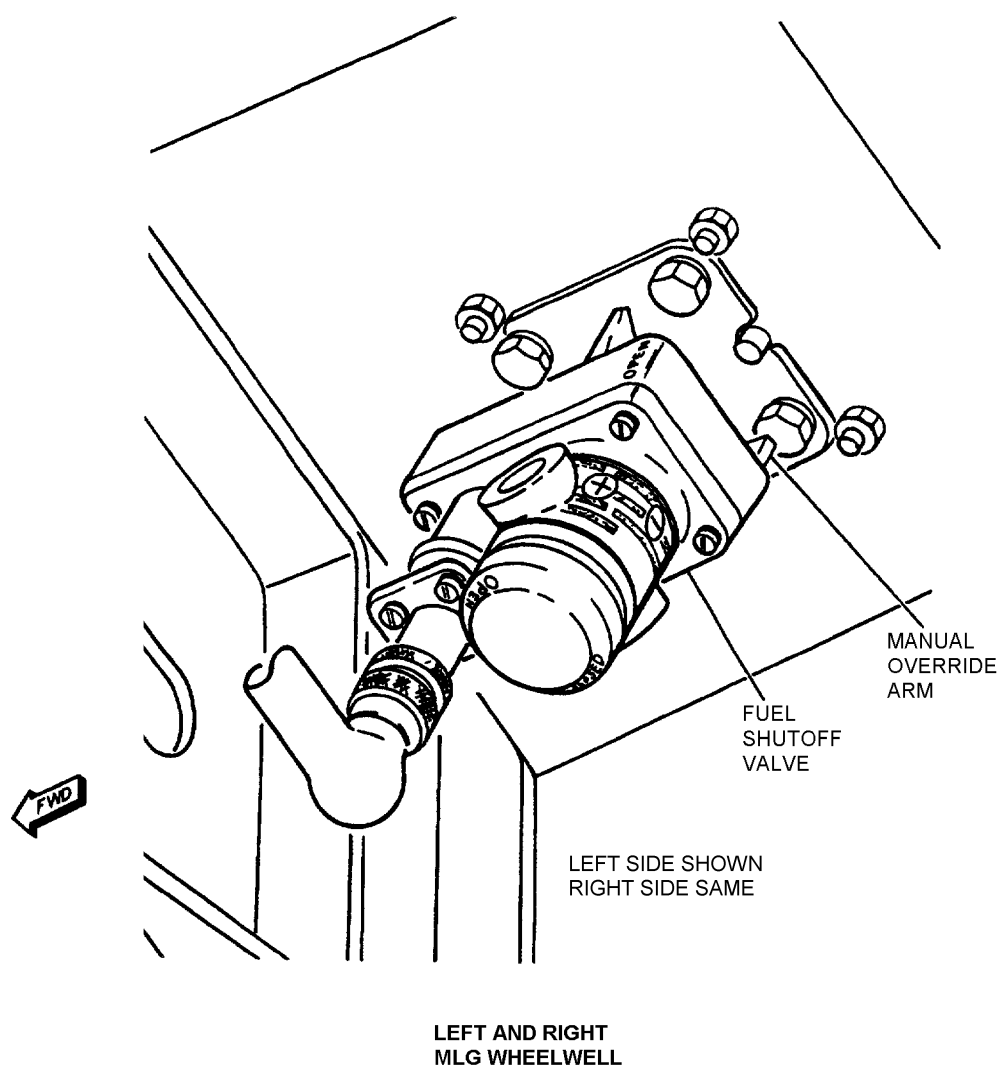


Figure 1. Restrictors (Sheet 2)

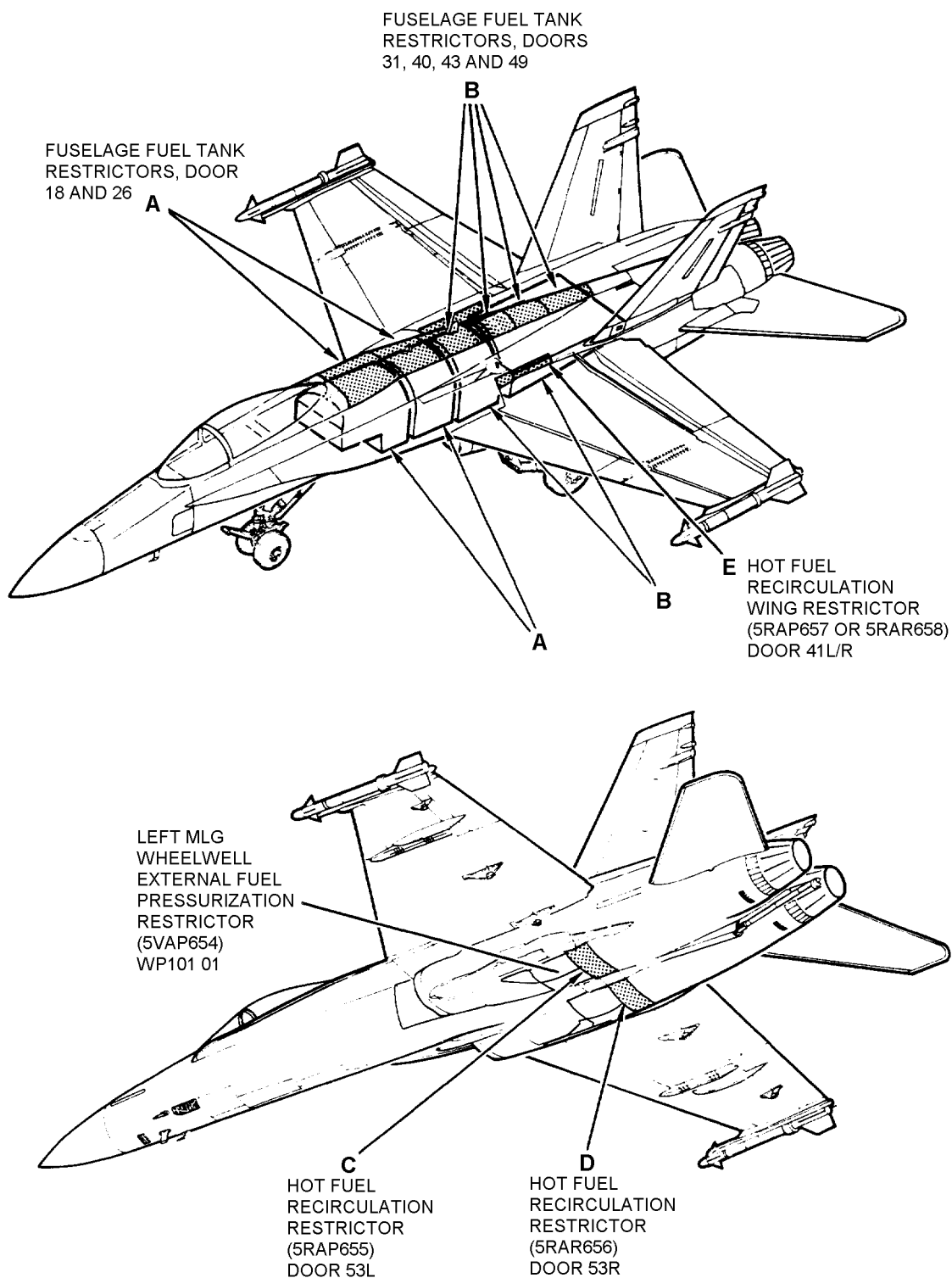


Figure 1. Restrictors (Sheet 3)

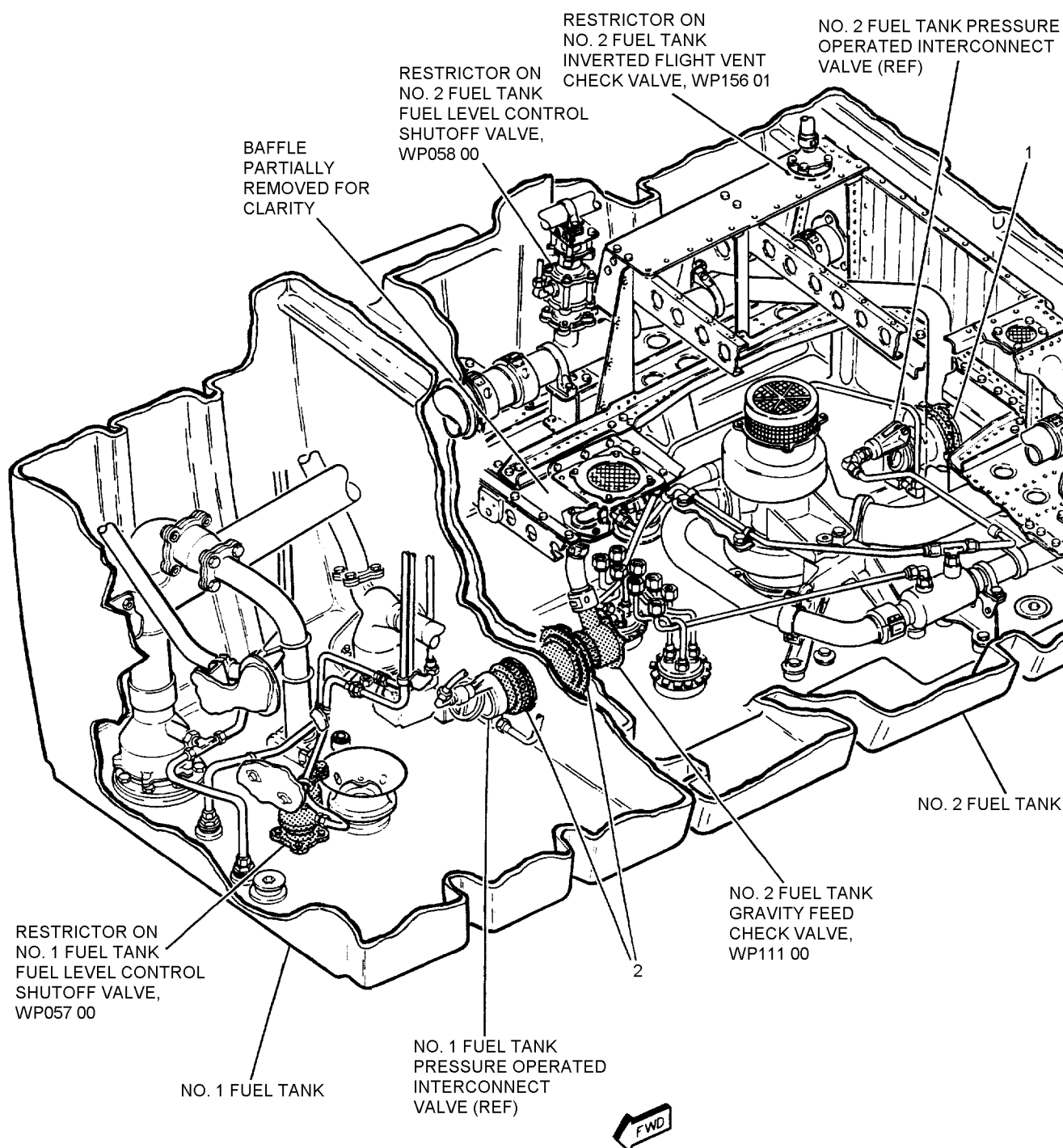


Figure 1. Restrictors (Sheet 4)

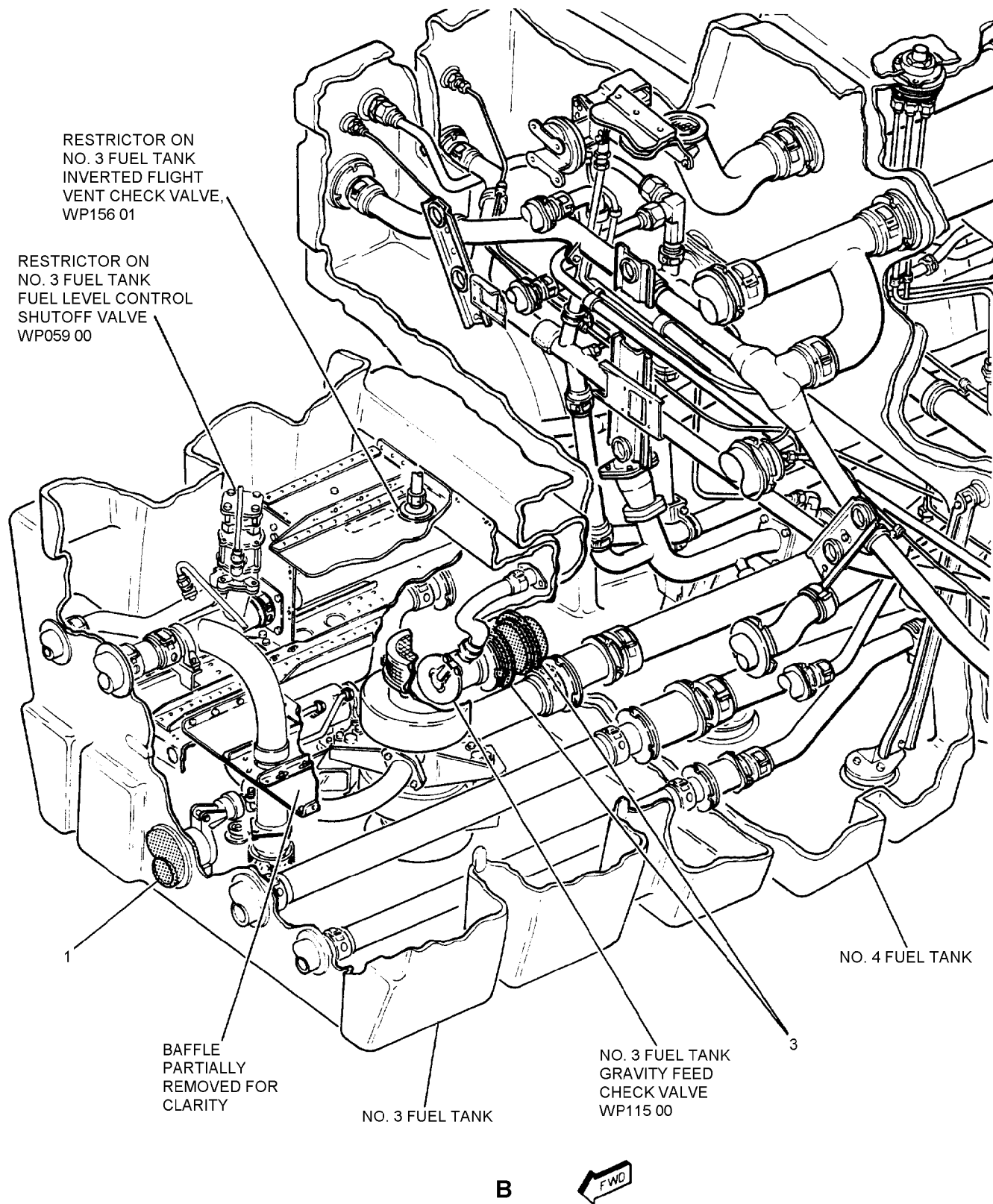


Figure 1. Restrictors (Sheet 5)

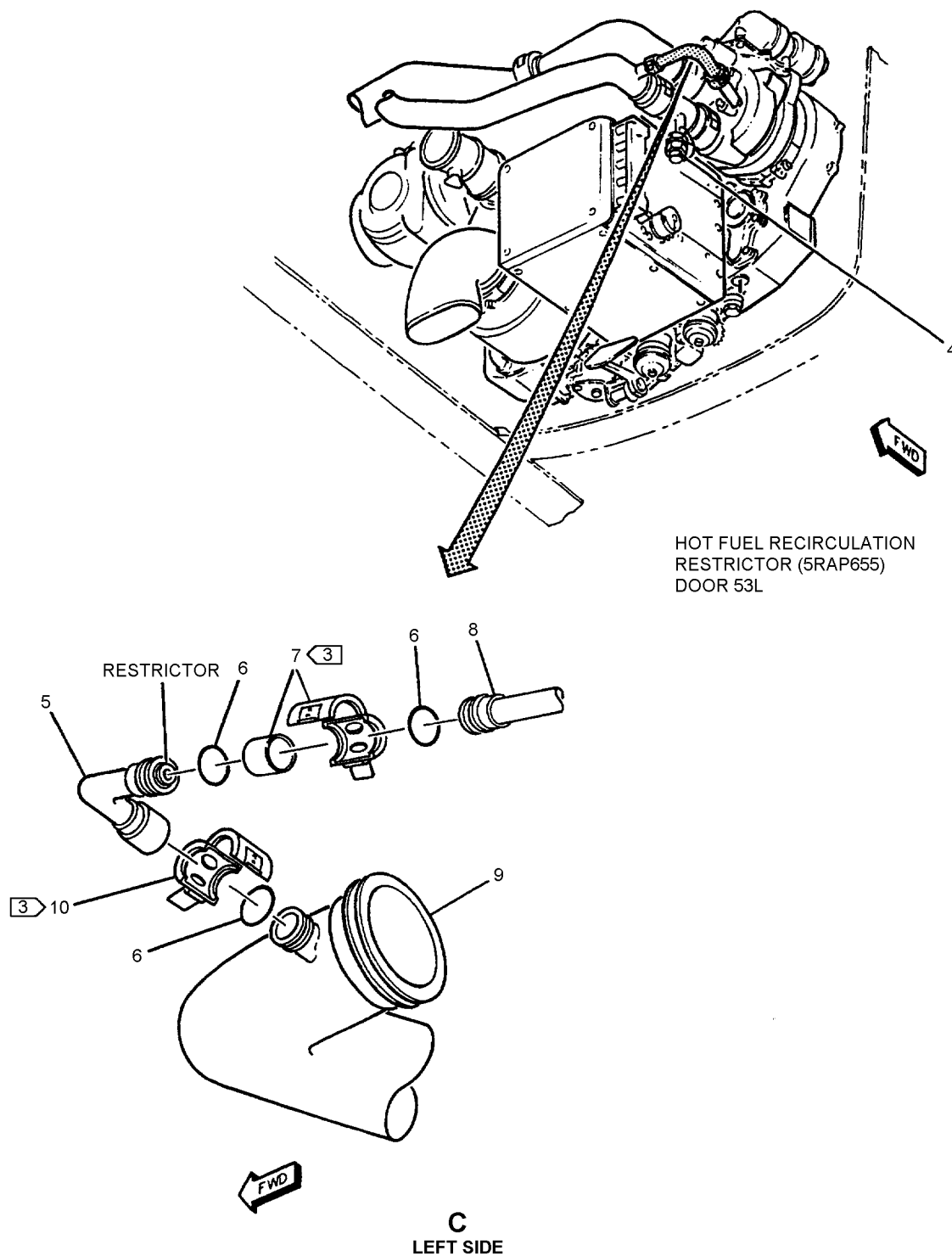


Figure 1. Restrictors (Sheet 6)

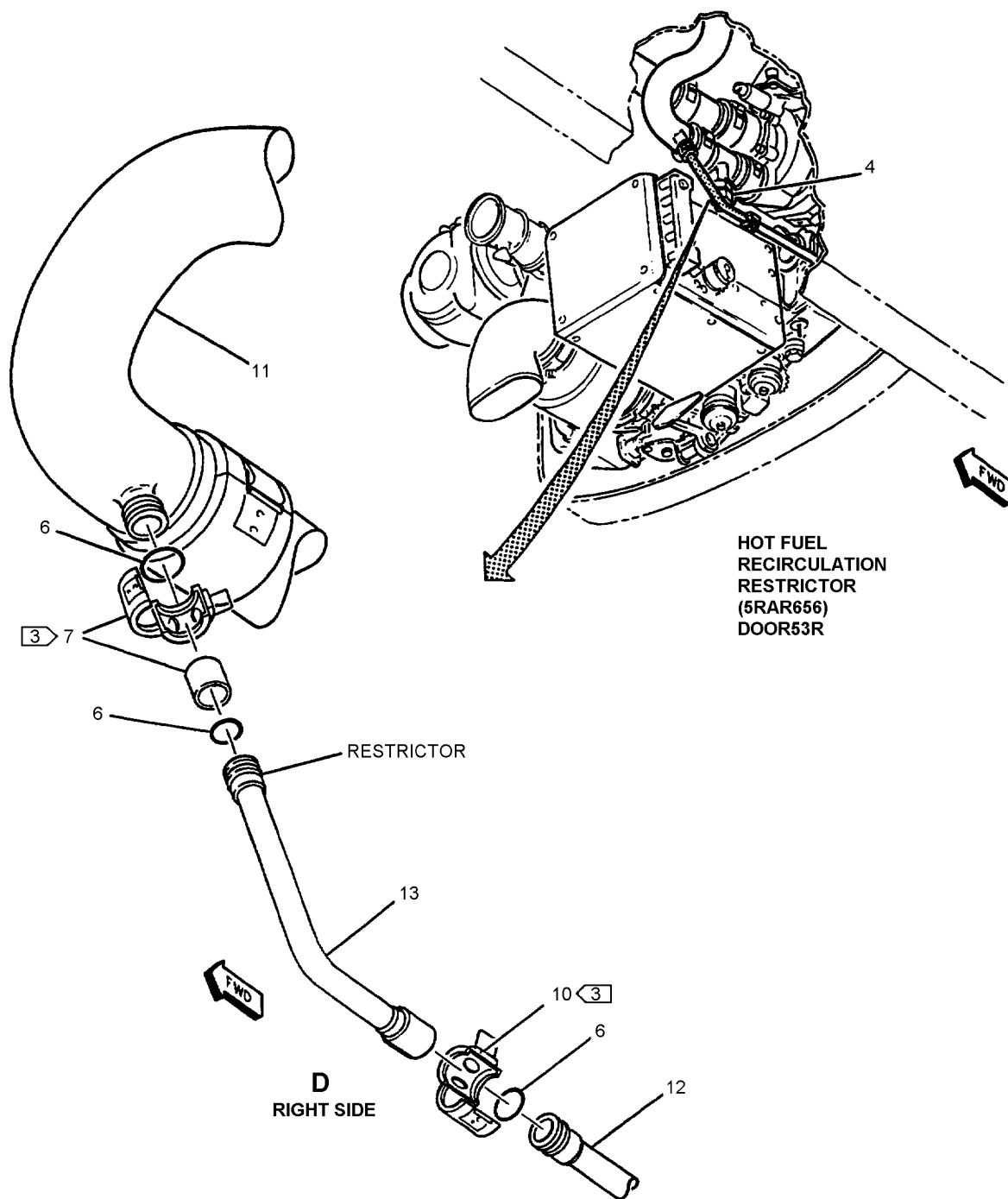
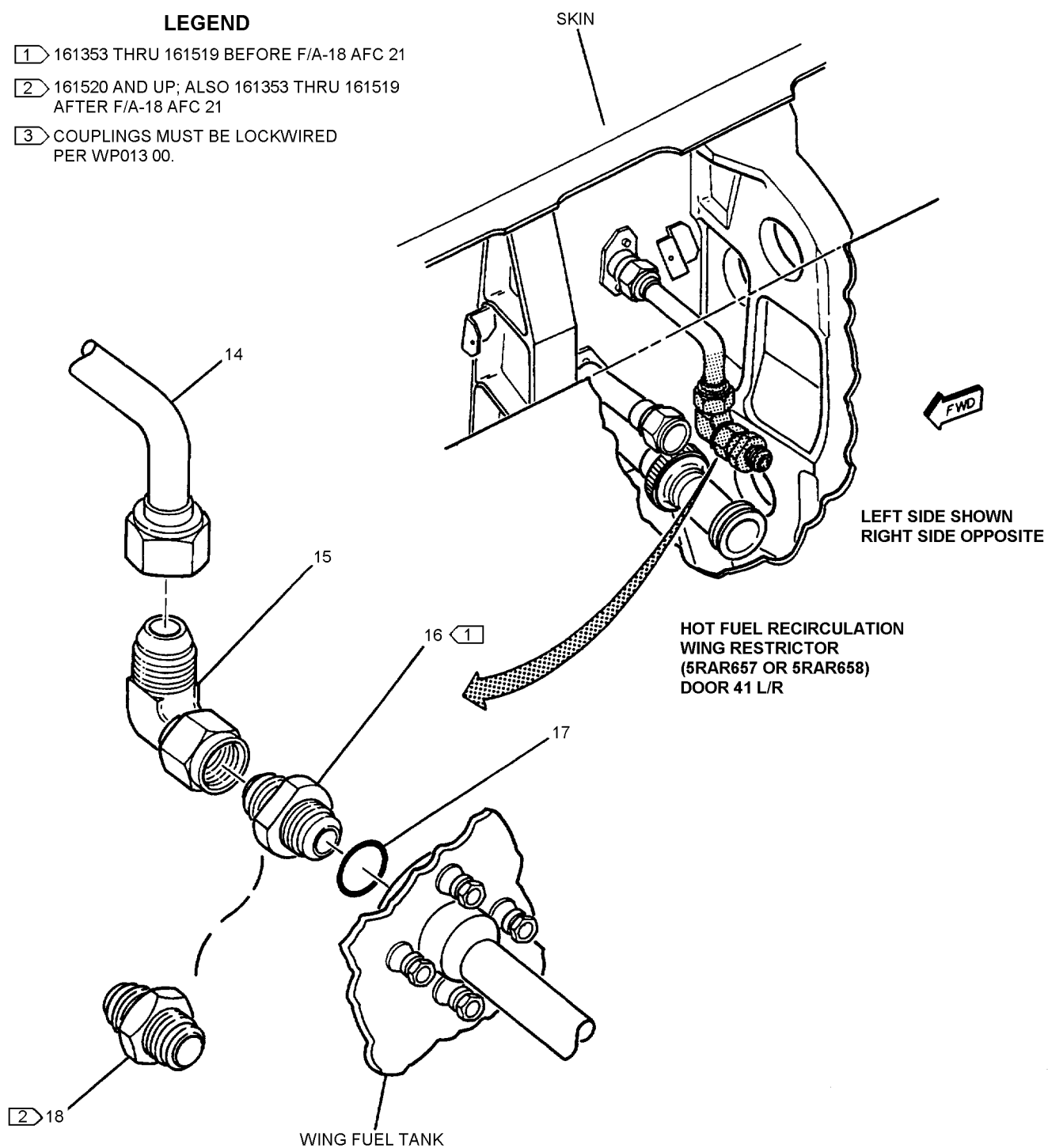


Figure 1. Restrictors (Sheet 7)

LEGEND

- 1 161353 THRU 161519 BEFORE F/A-18 AFC 21
- 2 161520 AND UP; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 21
- 3 COUPLINGS MUST BE LOCKWIRED PER WP013 00.

**Figure 1. Restrictors (Sheet 8)**

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		RESTRICTORS			
1	74A585709-1005	. CONNECTOR, TUBE, BULKHEAD - GRAVITY, INTERCONNECT, Y419.0 (NO. 2 FUEL TANK PRESSURE OPERATED INTERCONNECT VALVE RESTRICTOR) (76301) (5RAP665)	1		XBOZZ
	74A586212-1001	. CONNECTOR, TUBE, BULKHEAD - 2.50 IN, GRAVITY INTCON, Y419 (NO. 2 FUEL TANK PRESSURE OPERATED INTERCONNECT VALVE RESTRICTOR) (76301) (5RAP665)	1	A	XBOZZ
2	74A586211-1001	. CONNECTOR, TUBE, BULKHEAD - 2.50 IN. DIA. G FEED, Y383 (NO. 1 FUEL TANK PRESSURE OPERATED INTERCONNECT VALVE RESTRICTOR) (76301) (5VAP538)	1	A	XBOZZ
3	74A586347-1001	. CONNECTOR, TUBE, BULKHEAD - GRAVITY INTERCONNECT, Y453 (NO. 3 FUEL TANK GRAVITY FEED CHECK VALVE RESTRICTOR) (76301) (5VAP608)	1	A	XBOZZ
4	74A587050-2001 @ AN929A10J	. CAP ASSEMBLY, DRAIN -TUBE, FUEL (76301) CAP (INCLUDES AN818L10J NUT)	1		XBOZZ
	AN815-10J	. NIPPLE (USE WITH INDEX 4)	1	*	PAOZZ
5	74A586933-1001	. TUBE ASSEMBLY, METAL -FUEL MOTIVE FLOW CHECK VALVE, LH (HOT FUEL RECIRCULATION RESTRICTOR TUBE) (76301) (5RAP655) (LEFT SIDE ONLY)	1	B	PAOZZ
	74A586933-1003	. TUBE ASSEMBLY, METAL -FUEL MOTIVE FLOW CHECK VALVE, LH (HOT FUEL RECIRCULATION RESTRICTOR TUBE) (76301) (5RAP655) (LEFT SIDE ONLY)	1	C	PAOZZ
	74A586933-1005	. TUBE ASSEMBLY, METAL - FUEL MOTIVE FLOW CHECK VALVE, LH (HOT FUEL RECIRCULATION RESTRICTOR TUBE) (76301) (5RAP655) (LEFT SIDE ONLY)	1	D	PAOZZ
6	M25988/1-015	. PACKING (SUPERSEDES M83248/1-015)	6		PAOZZ
7	W901K8CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-8C) (INCLUDES SLEEVE)	2	E	PAOZZ
	14J12-8C	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-8C) (INCLUDES SLEEVE)	2	E	PAOZZ
	W901F8CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-8C) (INCLUDES SLEEVE)	2	F	PAOZZ
8	74A586935-1003	. TUBE ASSEMBLY, METAL - PRESSURE, Y554.532 (76301) (LEFT SIDE ONLY)	1		PAOZZ
	74A586935-1001	. SEE ABOVE	1	*	PAOZZ
9	74A586961-1009	. TUBE ASSEMBLY, METAL, MAIN MOTIVE FLOW BOOST, LH (HEAT EXCHANGERS WASH FILTER) (76301) (LEFT SIDE ONLY) (5FAP647)	1		PAOGG
	74A586961-1007	. SEE ABOVE	1	*	PAOGG

Figure 1. Restrictors (Sheet 9)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
10	74A586961-1003	. SEE ABOVE	1	*	PAOZZ
	W904K8CE	. COUPLING, CLAMP, GROOVED (HALF)	2	E	PAOZZ
		(79326) (MCDONNELL SPEC 7M765-8C-1)			
	14C12-8C	. COUPLING, CLAMP, GROOVED (HALF)	2	E	PAOZZ
11		(24984) (MCDONNELL SPEC 7M765-8C-1)			
	W904E8CE	. COUPLING, CLAMP, GROOVED (HALF)	2	F	PAOZZ
		(79326) (MCDONNELL SPEC 7M550-8C-1)			
	74A586955-1011	. TUBE ASSEMBLY, METAL - FUEL MAIN	1		PAOGG
12		MOTIVE FL BOOST, Y541.1 (HEAT EXCHANGERS WASH FILTER) (76301) (RIGHT SIDE ONLY) (5FAR648)			
	74A586955-1009	. SEE ABOVE	1	*	PAOGG
	74A586955-1005	. SEE ABOVE	1	*	PAOGG
	74A586934-1003	. TUBE ASSEMBLY, METAL - PRESSURE	1		PAOZZ
13		Y550.512 (76301)			
	74A586934-1001	. SEE ABOVE	1	*	PAOZZ
	74A587018-1001	. TUBE ASSEMBLY, METAL - FUEL MOTIVE	1	B	PAOZZ
		FLOW CHECK VALVE, RH (HOT FUEL RECIRCULATION RESTRICTOR TUBE) (5RAR656) (RIGHT SIDE ONLY) (76301)			
14	74A587018-1003	. TUBE ASSEMBLY, METAL - FUEL MOTIVE	1	C	PAOZZ
		FLOW CHECK VALVE, RH (HOT FUEL RECIRCULATION RESTRICTOR TUBE) (76301) (5RAR656) (RIGHT SIDE ONLY)			
	74A587018-1005	. TUBE ASSEMBLY, METAL - FUEL MOTIVE	1	D	PAOZZ
		FLOW CHECK VALVE, RH (HOT FUEL RECIRCULATION RESTRICTOR TUBE) (76301) (5RAR656) (RIGHT SIDE ONLY)			
15	74A583159-1011	. TUBE ASSY, METAL - HOT FUEL	1		XBOZZ
		RECIRCULATION, FUS TO WING (76301) (L. WING) SUPERSEDES 74A583159-1005)			
	74A583159-1013	. SEE ABOVE (R. WING)	1		XBOZZ
	7M148V12	. ELBOW (76301)	2		PAOZZ
16	7M148DA12	. ELBOW (76301)	2	*	PAOZZ
	74A583164-2001	. ORIFICE FITTING - CONTINUOUS HOT FUEL	1	B	XBOZZ
		RECIRCULATION, WING (HOT FUEL RECIRCULATION WING RESTRICTOR) (76301) (5RAP657 OR 5RAR658)			
	MS29512-12	. PACKING	1		PAOZZ
18	7M637BD-12D	. NIPPLE (76301)	1	G	PAOZZ

@ MADE FROM AN929A10J.

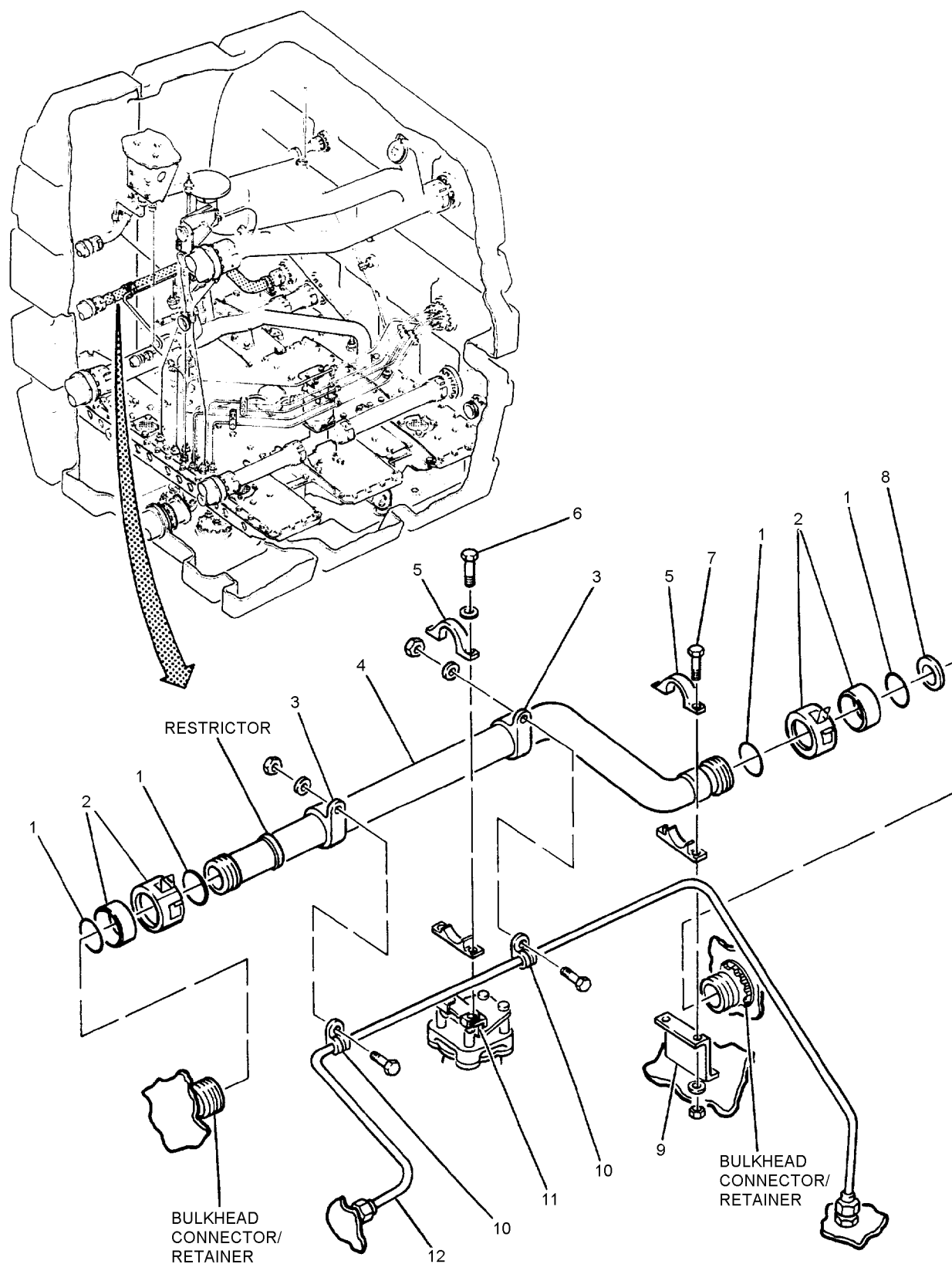
* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161353 THRU 161715	F/A-18A/B
B	161353 THRU 161519 BEFORE F/A-18 AFC 21	F/A-18A/B

Figure 1. Restrictors (Sheet 10)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		C						161520 THRU 161761; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 21		F/A-18A/B	
		D						161924 & UP		F/A-18A/B	
		E						161924 & UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 43		F/A-18A/B	
		F						161353 THRU 161761 BEFORE F/A-18 AFC 43		F/A-18A/B	
		G						161520 & UP; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 21		F/A-18A/B	

Figure 1. Restrictors (Sheet 11)



1440102A

Figure 2. No. 2 Fuel Tank Transfer Restrictor (5RAP659), 161353 THRU 161519 BEFORE F18 AFC 39 (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		NO. 2 FUEL TANK FUEL TRANSFER									
		RESTRICTOR (5RAP659) 161353 THRU									
		161519 BEFORE F18 AFC 39									
1	MS29513-218	.	PACKING						4		PAOZZ
2	W901K20DE	.	COUPLING, CLAMP, GROOVED (79326)						2	*	PAOZZ
			(MCDONNELL SPEC 7M765-20D)								
			(INCLUDES SLEEVE)								
	14J12-20A	.	COUPLING, CLAMP, GROOVED (24984)						2	*	PAOZZ
			(MCDONNELL SPEC 7M765-20D)								
			(INCLUDES SLEEVE)								
3	MS25281-R20	.	CLAMP						2		PAOZZ
4	74A586270-1007	.	TUBE ASSEMBLY, METAL - M/F PRESS						1		XBOZZ
			TO TANK 1, TANK 2 BYPASS (NO. 2								
			FUEL TANK FUEL TRANSFER								
			RESTRICTOR) (76301) (5RAP659)								
	74A586270-1005 @	.	SEE ABOVE						1	*	XBOZZ
5	NAS1787A20G	.	CLAMP						2		PAOZZ
6	NAS673V3	.	BOLT						2		PAOZZ
	AN960JD01L	.	WASHER (USE WITH INDEX 6)						2		PAOZZ
	A11144-7-3	.	NUT, CLIP (72962) (MCDONNELL						2	*	PAOZZ
			SPEC ST3M523C3M) (USE WITH INDEX 6)								
	130091	.	NUT, CLIP (76530) (MCDONNELL SPEC						2	*	PAOZZ
			ST3M523C3M) (USE WITH INDEX 6)								
7	NAS673V7	.	BOLT						2		PAOZZ
	AN960JD10L	.	WASHER (USE WITH INDEX 7)						2		PAOZZ
	NAS1291C3M	.	NUT (USE WITH INDEX 7)						2		PAOZZ
8	74A585002-9001 @	.	RESTRICTOR (76301)						1		-
9	74A586204-2403	.	SUPPORT ASSY (76301) (FOR REPAIR						1		XBOOO
			SEE WP020 04)								
10	MS25281-R6	.	CLAMP (SUPERSEDES MS25281-6)						2		PAOZZ
	NAS673V2	.	BOLT (AP)						1		PAOZZ
	AN960JD10L	.	WASHER (AP)						1		PAOZZ
	NAS1291C3M	.	NUT (AP)						1		PAOZZ
11	74A586244-1013	.	SUPPORT (76301)						1		XBOGG
12	74A586682-1001	.	TUBE ASSEMBLY, METAL - GRAVITY						1		MGOZZ
			FEED INTERCONNECT TO TK 1 (76301)								
			* ALTERNATE OR EQUIVALENT PARTS.								
			(WP002 00)								
			@ LOOSE RESTRICTOR USE WITH								
			74A586270-1005 TUBE								

Figure 2. No. 2 Fuel Tank Transfer Restrictor (5RAP659), 161353 THRU 161519 BEFORE F18 AFC 39 (Sheet 2)

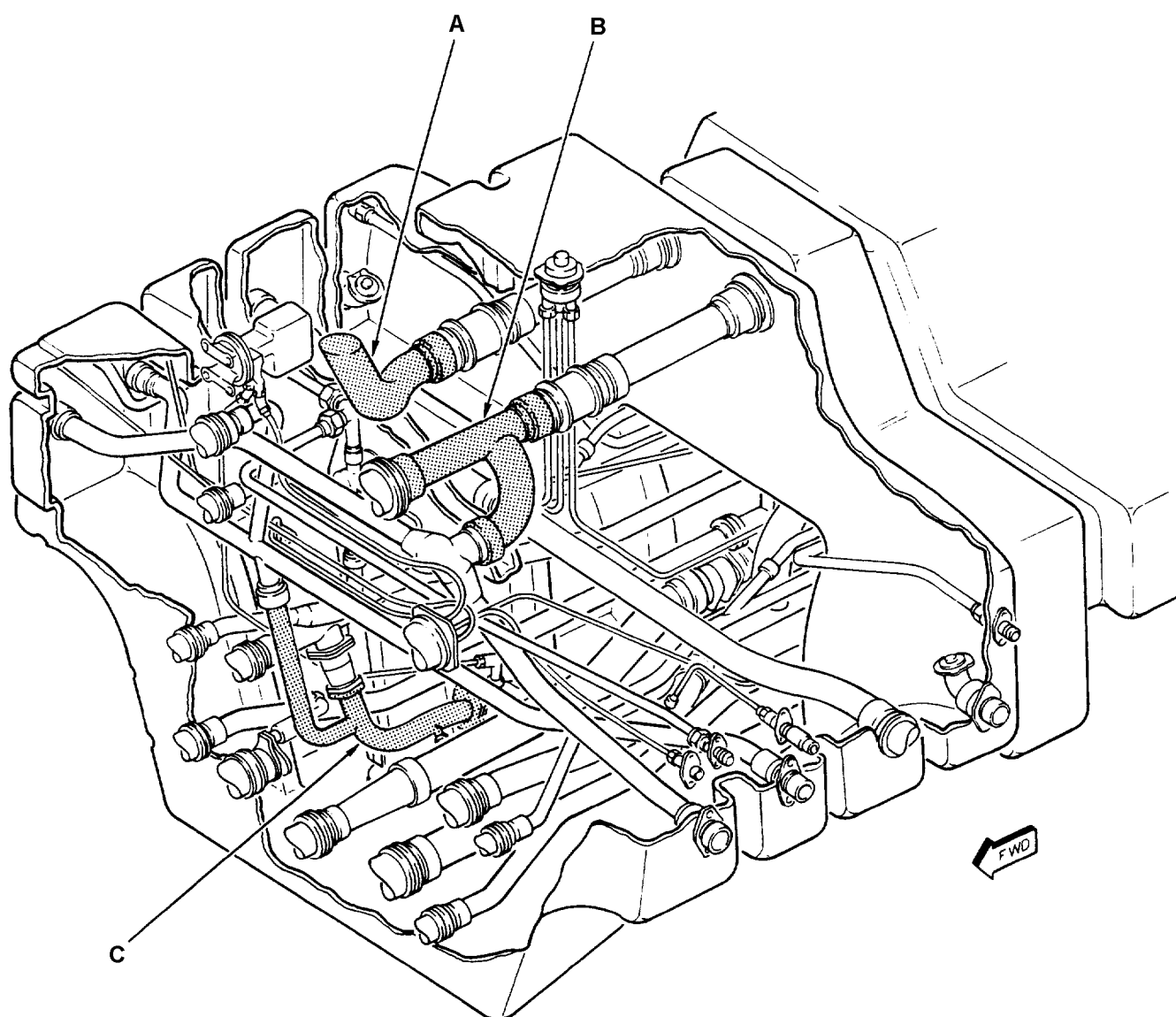


Figure 3. No. 4 Fuel Tank Transfer Restrictor (5RAP660) (Sheet 1)

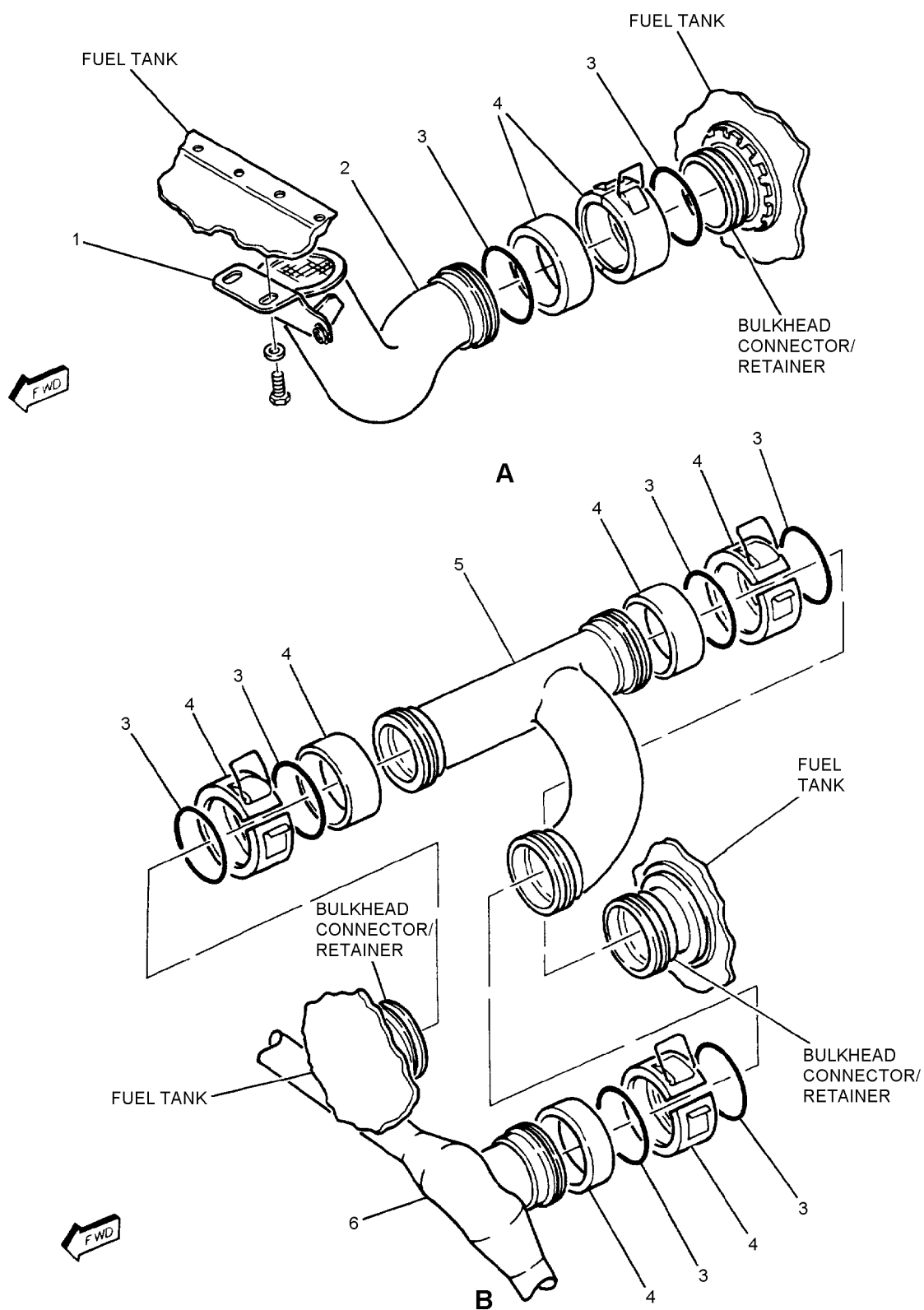


Figure 3. No. 4 Fuel Tank Transfer Restrictor (5RAP660) (Sheet 2)

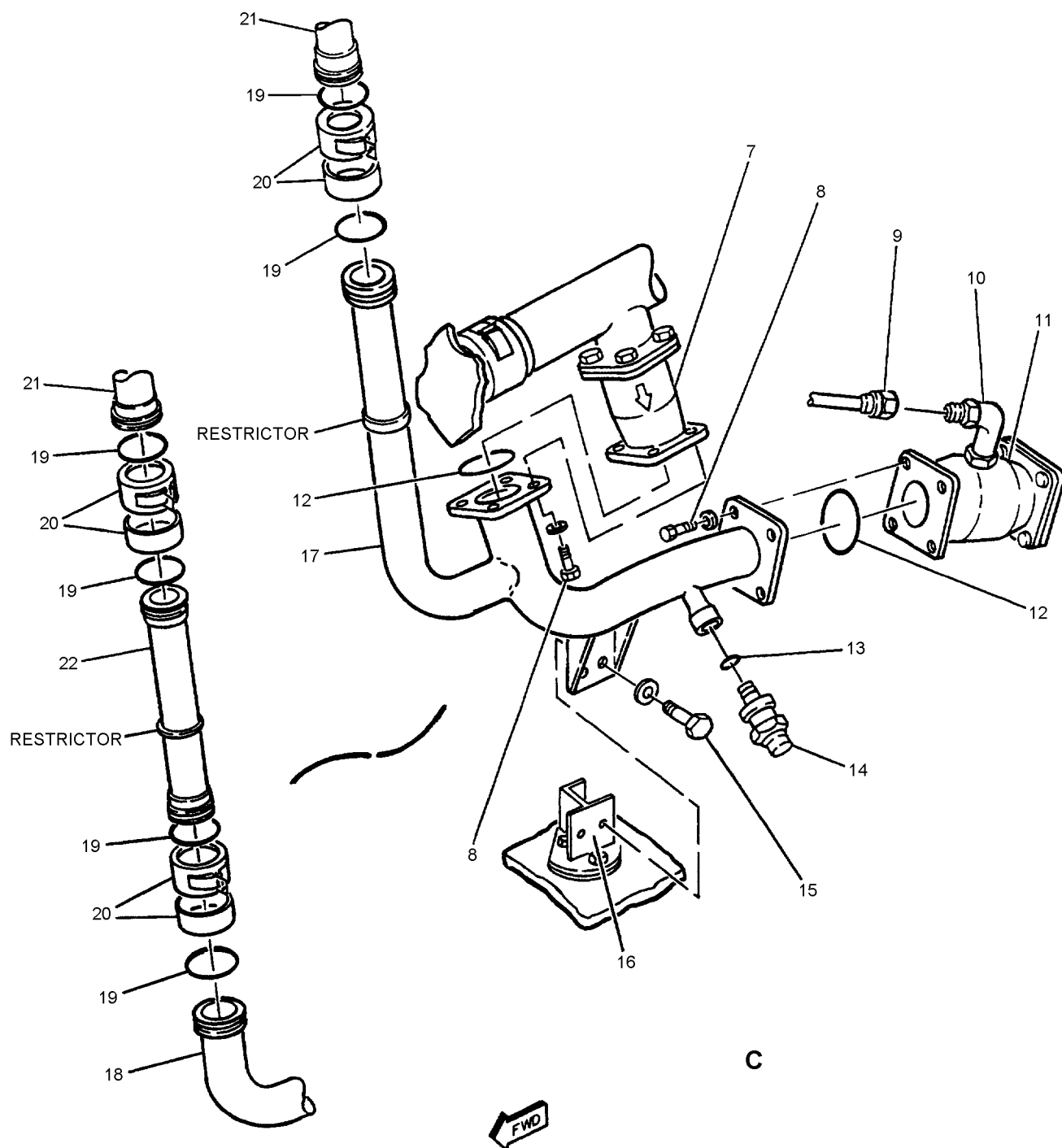


Figure 3. No. 4 Fuel Tank Transfer Restrictor (5RAP660) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 4 FUEL TANK FUEL TRANSFER RESTRICTOR (5RAP660)			
1	74A586429-1095	. BRACKET (76301) (SUPERSEDES 74A586429-1015)	1		XBOOO
	NAS674V1	. BOLT (AP)	2		PAOZZ
	AN960JD416L	. WASHER (AP)	2		PAOZZ
	74A586429-2199	. BRACKET (76301) (USE WITH INDEX 1)	1		XBOZZ
	MS21060L3	. NUT, PLATE (USE WITH INDEX 1)	2		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
2	74A586462-1003	. TUBE ASSEMBLY, METAL - CLIMB VENT (76301) (SUPERSEDES 74A586462-1001)	1		XBOZZ
	NAS673V2	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
3	MS29513-230	. PACKING	8		PAOZZ
4	W901K40DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-40D) (INCLUDES SLEEVE)	4		PAOZZ
	14J12-40A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-40D) (INCLUDES SLEEVE)	4		PAOZZ
	W901F40DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-40D) (INCLUDES SLEEVE)	4	*	PAOZZ
5	74A586465-1007	. MANIFOLD, FLUID, AIRCRAFT - MAIN VENT, FUEL TK NO. 4 (76301) (REPLACES 74A586465-1003)	1		PAOZZ
	74A586465-1005	. SEE ABOVE	1	*	PAOZZ
	74A586465-1003	. MANIFOLD, FLUID, AIRCRAFT - MAIN VENT, FUEL TK NO. 4 (76301) (USE UNTIL EXHAUSTED)	1	B	PAOZZ
6	74A586470-1007	. TUBE ASSEMBLY, METAL - VENT LH WING (76301) (REPLACES 74A586470-1003)	1		PAOZZ
	74A586470-1003	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	*	PAOZZ
7	2760121-105	. VALVE, CHECK - FUEL, LARGE LINE MOUNTED (NO. 4 FUEL TANK REFUEL/TRANSFER CHECK VALVE) (92003) (MCDONNELL SPEC 74-580149-113) (5VAP557) (REPLACES 2760121-101, 2760121-103)	1		PAOZZ
	2760121-103	. VALVE - CHECK - FUEL, LARGE LINE MOUNTED (NO. 4 FUEL TANK REFUEL/TRANSFER CHECK VALVE) (92003) (MCDONNELL SPEC 74-580149-111) (5VAP557) (REPLACES 2760121-101) (USE UNTIL EXHAUSTED)	1	D	PAOZZ
	2760121-101	. VALVE - CHECK - FUEL, LARGE LINE MOUNTED (NO. 4 FUEL TANK REFUEL/TRANSFER CHECK VALVE) (92003) (MCDONNELL SPEC 74-580149-105) (5VAP557) (USE UNTIL EXHAUSTED)	1	A*	PAOZZ
8	NAS674V4	. BOLT	8		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 8)	8		PAOZZ

Figure 3. No. 4 Fuel Tank Transfer Restrictor (5RAP660) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USE ON CODE	SM&R CODE
		1 2 3 4 5 6 7			
9	74A586858-1005	. TUBE ASSY, METAL - REFUEL SHUTOFF, LEVEL CONT, TANK 4 (76301)	1		MGOZZ
10	7M148V6	. ELBOW (76301)	1		PAOZZ
	7M148DA6	. ELBOW (76301)	1	*	PAOZZ
11	2760113-113	. VALVE, CHECK - REFUEL LEVEL (NO. 4 FUEL TANK LEVEL CONTROL SHUTOFF VALVE) (92003) (MCDONNELL SPEC 74-580108-223) (5VAP569)	1		PAOZZ
	2760113-111	. VALVE, CHECK - REFUEL LEVEL (NO. 4 FUEL TANK LEVEL CONTROL SHUTOFF VALVE) (92003) (MCDONNELL SPEC 74-580108-217) (5VAP569)	1	*	PAOZZ
	2760113-109	. VALVE, CHECK - REFUEL LEVEL (NO. 4 FUEL TANK FUEL LEVEL CONTROL SHUTOFF VALVE) (92003) (MCDONNELL SPEC 74-580108-215) (5VAP569)	1	*	PAOZZ
	2760113-107	. VALVE, CHECK - REFUEL LEVEL (NO. 4 FUEL TANK FUEL LEVEL CONTROL SHUTOFF VALVE) (92003) (MCDONNELL SPEC 74-580108-201) (5VAP569)	1	*	PAOZZ
12	MS29513-224	. PACKING	2		PAOZZ
13	MS29512-06	. PACKING	1		PAOZZ
14	0130010700-2	. VALVE, CHECK - REFUEL/SCAVENGE CONTROL (NO. 4 FUEL TANK AUTOMATIC DRAIN VALVE) (83533) (MCDONNELL SPEC 74-580059-103) (5VAP568)	1		PAOZZ
15	NAS673V4	. BOLT	2		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 15)	2		PAOZZ
16	74A586402-1001	. BRACKET - ATTACH, SUPPORT FUEL LINE CLAMPS, RH (76301)	1		XBOGG
17	74A586474-1009 ϕ	. MANIFOLD, FLUID, AIRCRAFT - REFUEL, TANK NO. 4 (NO. 4 FUEL TANK FUEL TRANSFER RESTRICTOR) (76301) (5RAP660)	1	F	PAOZZ
18	74A587318-1001 ϕ	. MANIFOLD, FLUID, AIRCRAFT REFUEL, TANK NO. 4 (76301) (5RAP660)	1		PAOZZ
	74A586474-1013 ϕ	. MANIFOLD, FLUID, AIRCRAFT - REFUEL, TANK NO. 4 (76301) (5RAP660) 74A586474-1015)	1	H	PAOZZ
19	MS29513-218	. PACKING	2	F	PAOZZ
	MS29513-218	. PACKING	4	G	PAOZZ
20	W901K20DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-20D) (INCLUDES SLEEVE)	1	F	PAOZZ
	14J12-20A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-20D) (INCLUDES SLEEVE)	1	F	PAOZZ
	W901F20DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-20D) (INCLUDES SLEEVE)	1	F*	PAOZZ
	W901K20DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-20D) (INCLUDES SLEEVE)	2	G	PAOZZ
	14J12-20A	. SEE ABOVE (24984)	2	G	PAOZZ

Figure 3. No. 4 Fuel Tank Transfer Restrictor (5RAP660) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
	W901F20DE	. SEE ABOVE (79326) (MCDONNELL SPEC 7M550-20D)	2	G	PAOZZ
21	74A586481-1005	. MANIFOLD, FLUID, AIRCRAFT - FUEL TRANSFER TO WING, RH (76301)	1	E	XBOOO
	74A586390-1003	. MANIFOLD, FLUID, AIRCRAFT - FULL TRANSFER TO WING, RH (76301) (SUPERSEDES 74A586390-1001)	1	C	XBOOO
	MS21060L3	. NUT, PLATE (USE WITH INDEX 21)	1		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
22	74A586888-1001 ¢	. MANIFOLD, FLUID, AIRCRAFT - REFUEL TANK NO. 4 X-9-08 (NO. 4 FUEL TANK TRANSFER RESTRICTOR) (76301)	1	G	PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

¢ PARTS WITH THIS SYMBOL MUST BE
USED TOGETHER TO REPLACE PART
WITH ¢¢ SYMBOL.

¢¢ PART WITH THIS SYMBOL MUST BE
REPLACED BY PARTS WITH ¢ SYMBOL.

CODE	USABLE ON	MODEL
A	161353 THRU 161361	F/A-18A/B
B	161353 THRU 161519	F/A-18A/B
C	161756 & UP	F/A-18A/B
D	161353 THRU 161931	F/A-18A/B
E	161353 THRU 161755	F/A-18A/B
F	161353 THRU 161941	F/A-18A/B
G	161942 & UP; ALSO 161353 THRU 161941 AFTER 74A587318-1001 MANIFOLD IS INSTALLED.	F/A-18A/B
H	161942 AND UP	

Figure 3. No. 4 Fuel Tank Transfer Restrictor (5RAP660) (Sheet 6)

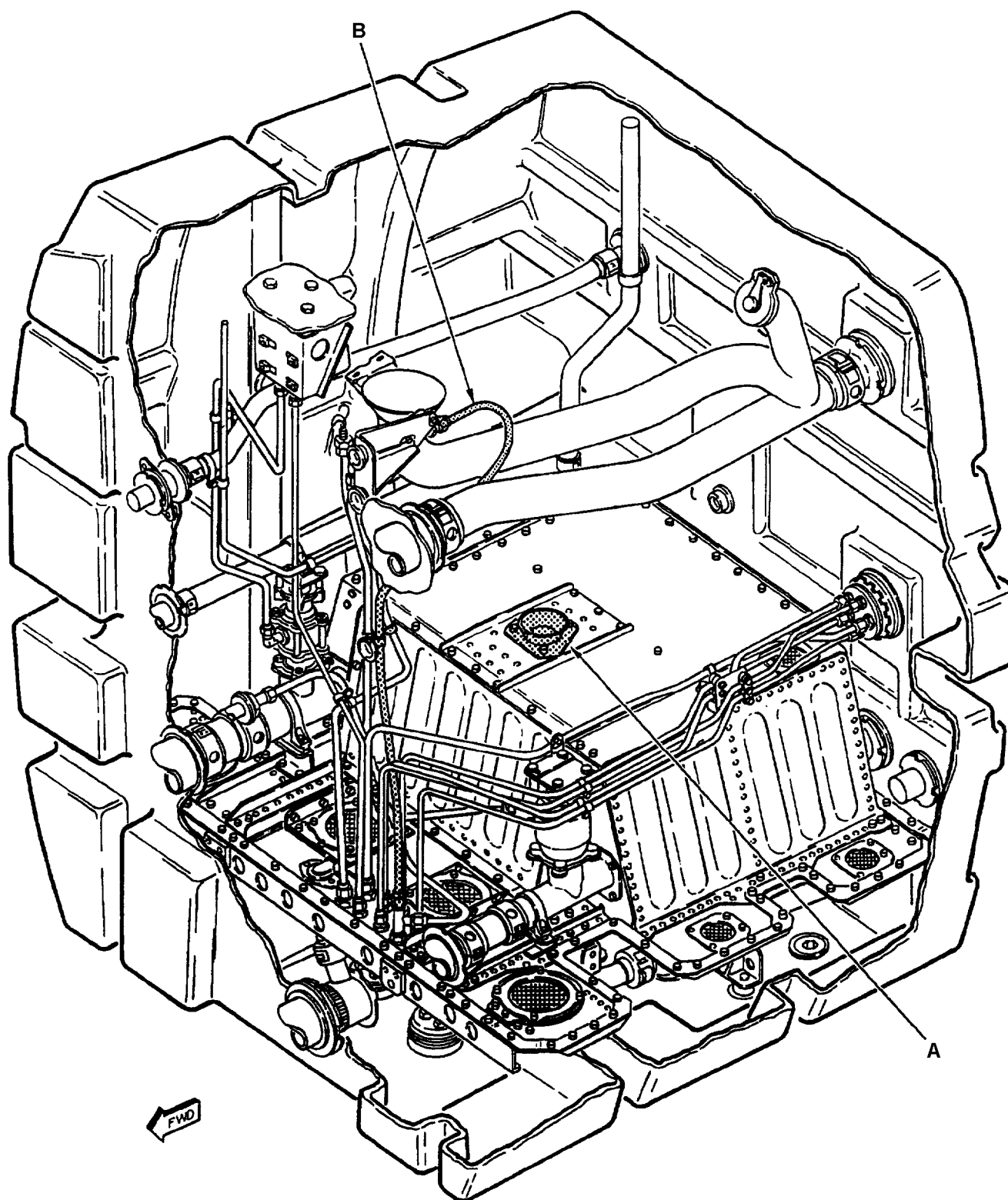


Figure 4. No. 2 Fuel Tank Level Sensor Tube Restrictor (5RAP667) (Sheet 1)

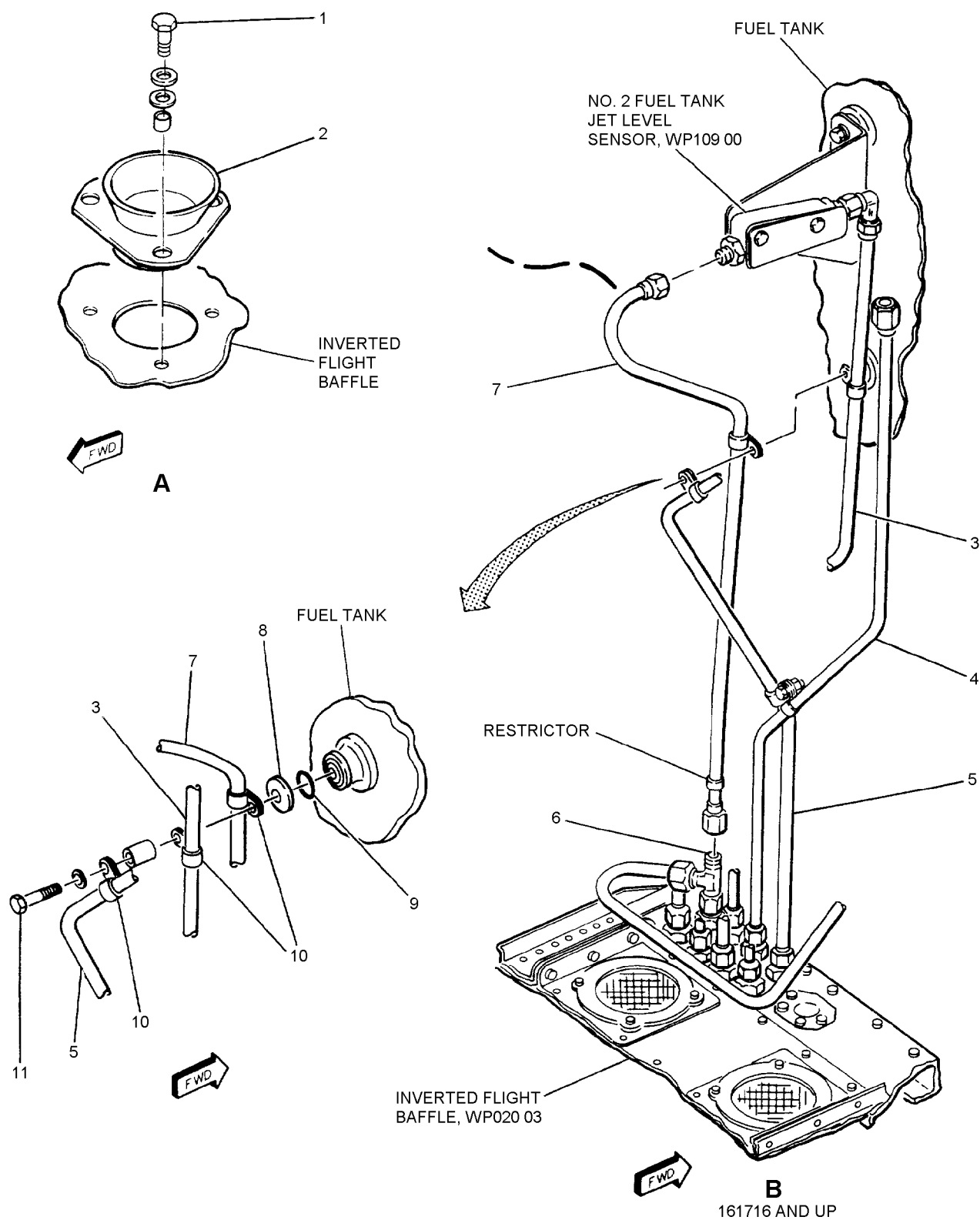


Figure 4. No. 2 Fuel Tank Level Sensor Tube Restrictor (5RAP667) (Sheet 2)

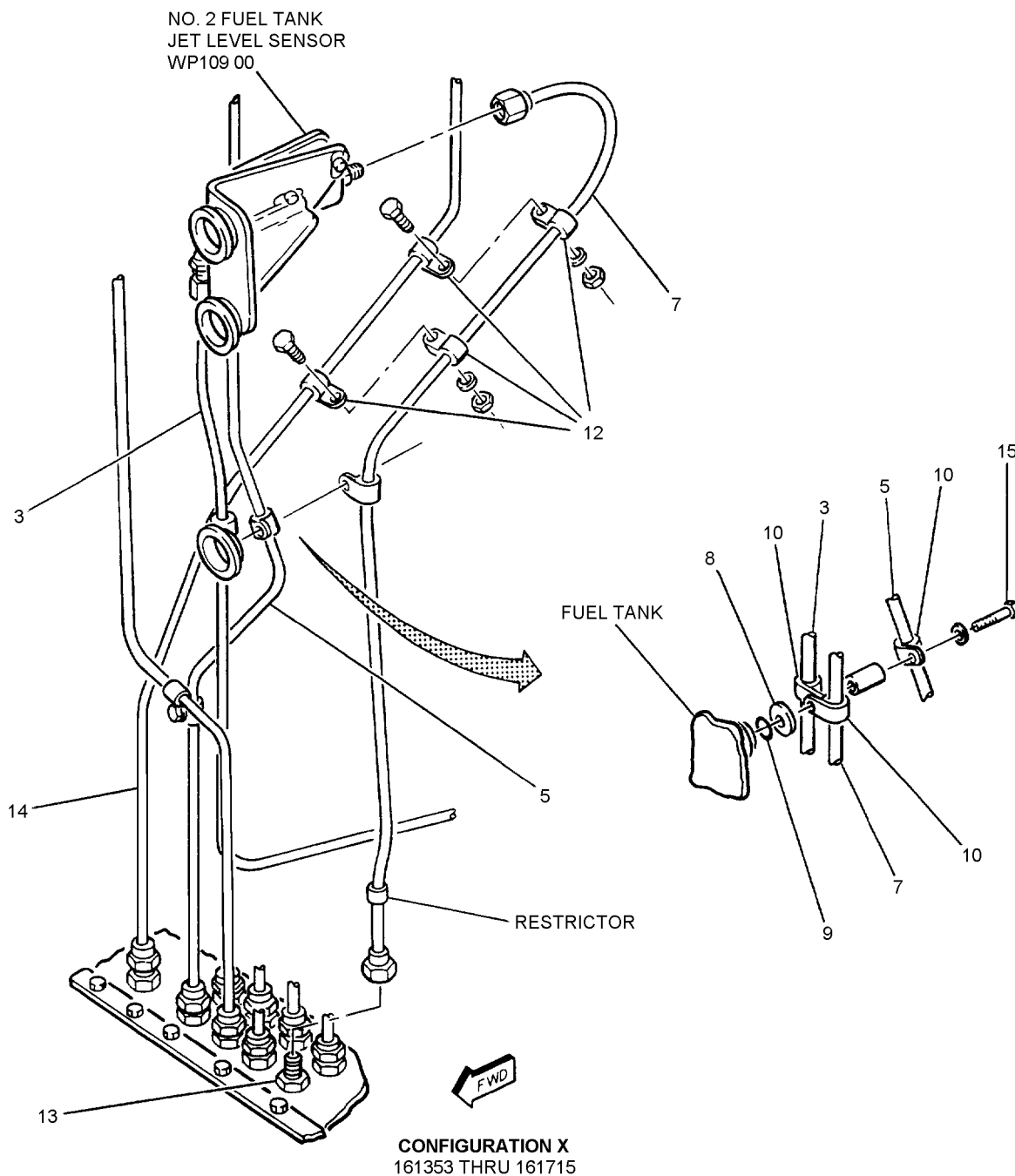


Figure 4. No. 2 Fuel Tank Level Sensor Tube Restrictor (5RAP667) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		NO. 2 FUEL TANK FUEL LEVEL SENSOR									
		TUBE RESTRICTOR (5RAP667)									
1	NAS673V4	.	BOLT						3		PAOZZ
	4M36-01016	.	WASHER (USE WITH INDEX 1) (76301)						6		PAOZZ
	NAS43DD3-8	.	SPACER (USE WITH INDEX 1)						3		PAOZZ
2	74A586297-2001	.	GUIDE, PROBE - FUEL QTY, TANK 2 & 3						1		XBOZZ
			(76301)								
3	74A586245-1001	.	TUBE ASSEMBLY, METAL - JET LEVEL						1	A	AGOGG
			SENSOR, TK NO. 2 (76301)								
	74A586245-1005	.	TUBE ASSEMBLY, METAL - JET LEVEL						1	B	AGOGG
			SENSOR, TK NO. 2 (76301)								
4	74A586821-1015	.	TUBE ASSEMBLY, METAL - PRECHECK						1		MGOZZ
			TANK 2, Y389 UN-FLOAT (76301)								
			(SUPERSEDES 74A586821-1005,								
			74A586821-1011 AND 74A586821-1013)								
5	74A586681-1005	.	TUBE ASSEMBLY, METAL - G FEED						1		MGOZZ
			POSITION SIGNAL, TANK NO. 2								
			(76301) (SUPERSEDES 74A586681-1001								
			AND 74A586681-1003)								
6	7M151V6	.	TEE (76301)						1	B	PAOZZ
7	74A586243-1003	.	TUBE ASSEMBLY, METAL - JET LVL						1		XBOZZ
			SENSOR, FUEL TK NO. 2 (NO. 2 FUEL								
			TANK FUEL LEVEL SENSOR TUBE								
			RESTRICTOR) (76301) (5RAP667)								
			(SUPERSEDES 74A586243-1001)								
8	74A586244-2005	.	WASHER (RETAINER) (76301)						1		PAOZZ
9	M25988/1-312	.	PACKING						1		PAOZZ
10	MS25281-R6	.	CLAMP (SUPERSEDES MS25281-6)						3		PAOZZ
11	NAS673V22	.	BOLT (AP)						1	B	PAOZZ
	AN960JD10L	.	WASHER (AP)						1		PAOZZ
	NAS43DD3-64	.	SPACER (AP)						1		PAOZZ
12	MS25281-R6	.	CLAMP (SUPERSEDES MS25281-6)						4	A	PAOZZ
	NAS673V4	.	BOLT (AP)						1		PAOZZ
	AN960JD10L	.	WASHER (AP)						1		PAOZZ
	NAS1291C3M	.	NUT (AP)						1		PAOZZ
13	7M637BT-6D	.	NIPPLE (76301)						1		PAOZZ
14	74A586241-1001	.	TUBE ASSEMBLY, METAL - VENT, FWD,						1	A	MGOZZ
			INVERTED FLT COMPT (76301)								
15	NAS673V26	.	BOLT						1	A	PAOZZ
	AN960JD10	.	WASHER (USE WITH INDEX 15)						1		PAOZZ
	NAS43DD3-64	.	SPACER (USE WITH INDEX 15)						1		PAOZZ

CODE	USABLE ON	MODEL
A	161353 THRU 161715 BEFORE F/A-18 AFC 53	F/A-18A/B
B	161716 & UP ALSO 161353 THRU 161715 AFTER F/A-18 AFC 53	F/A-18A/B

Figure 4. No. 2 Fuel Tank Level Sensor Tube Restrictor (5RAP667) (Sheet 4)

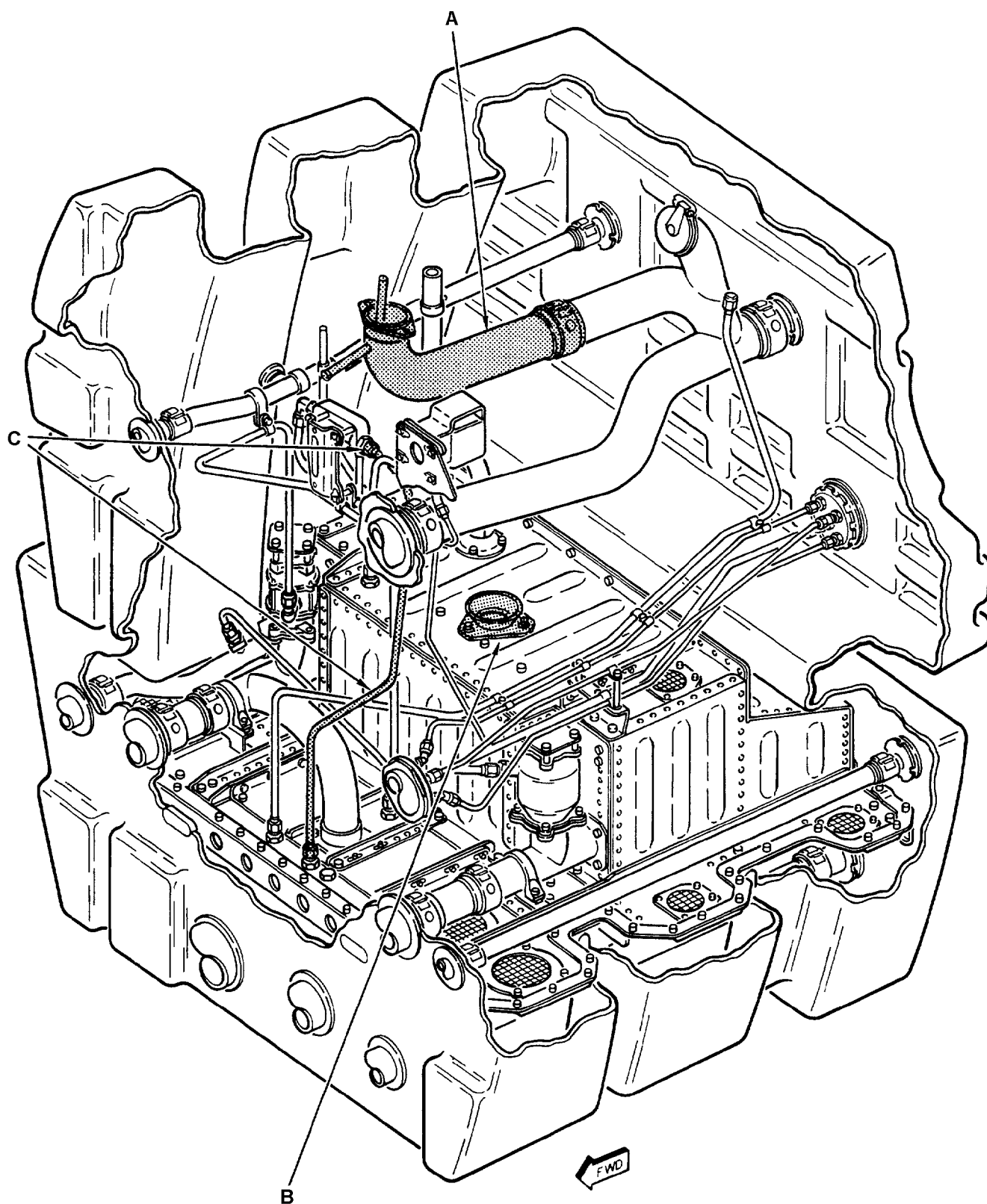
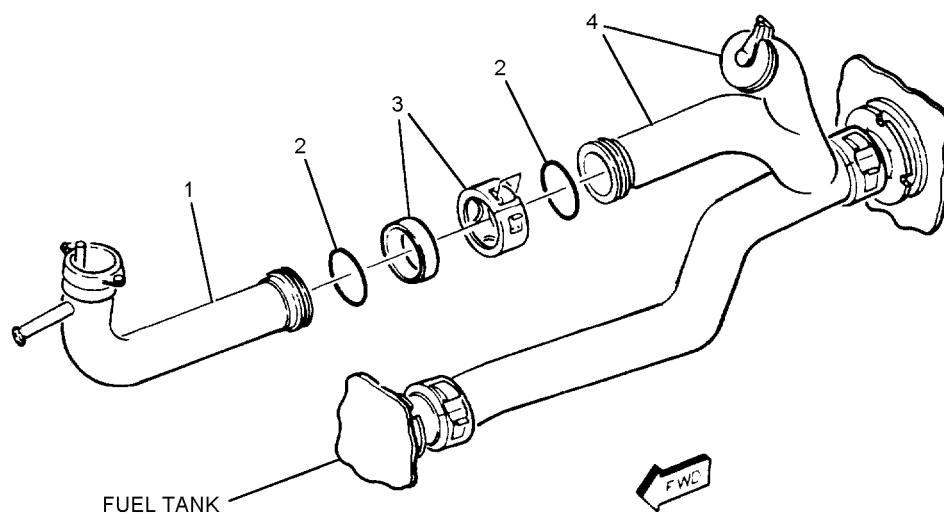
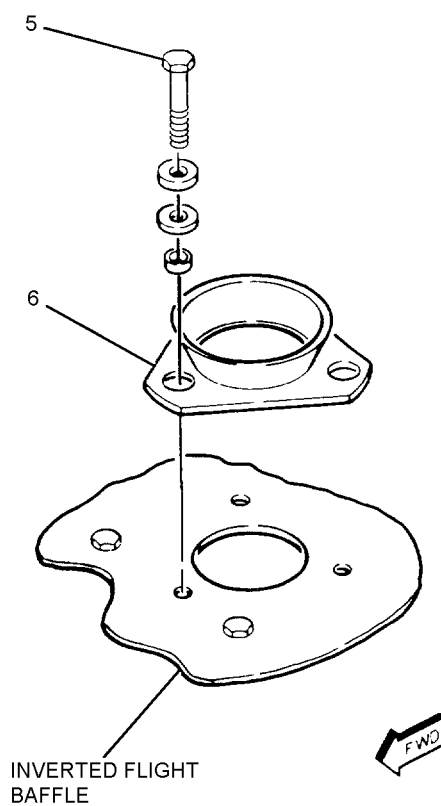


Figure 5. No. 3 Fuel Tank Level Sensor Tube Restrictor (5RAP668) (Sheet 1)



A



B

Figure 5. No. 3 Fuel Tank Level Sensor Tube Restrictor (5RAP668) (Sheet 2)

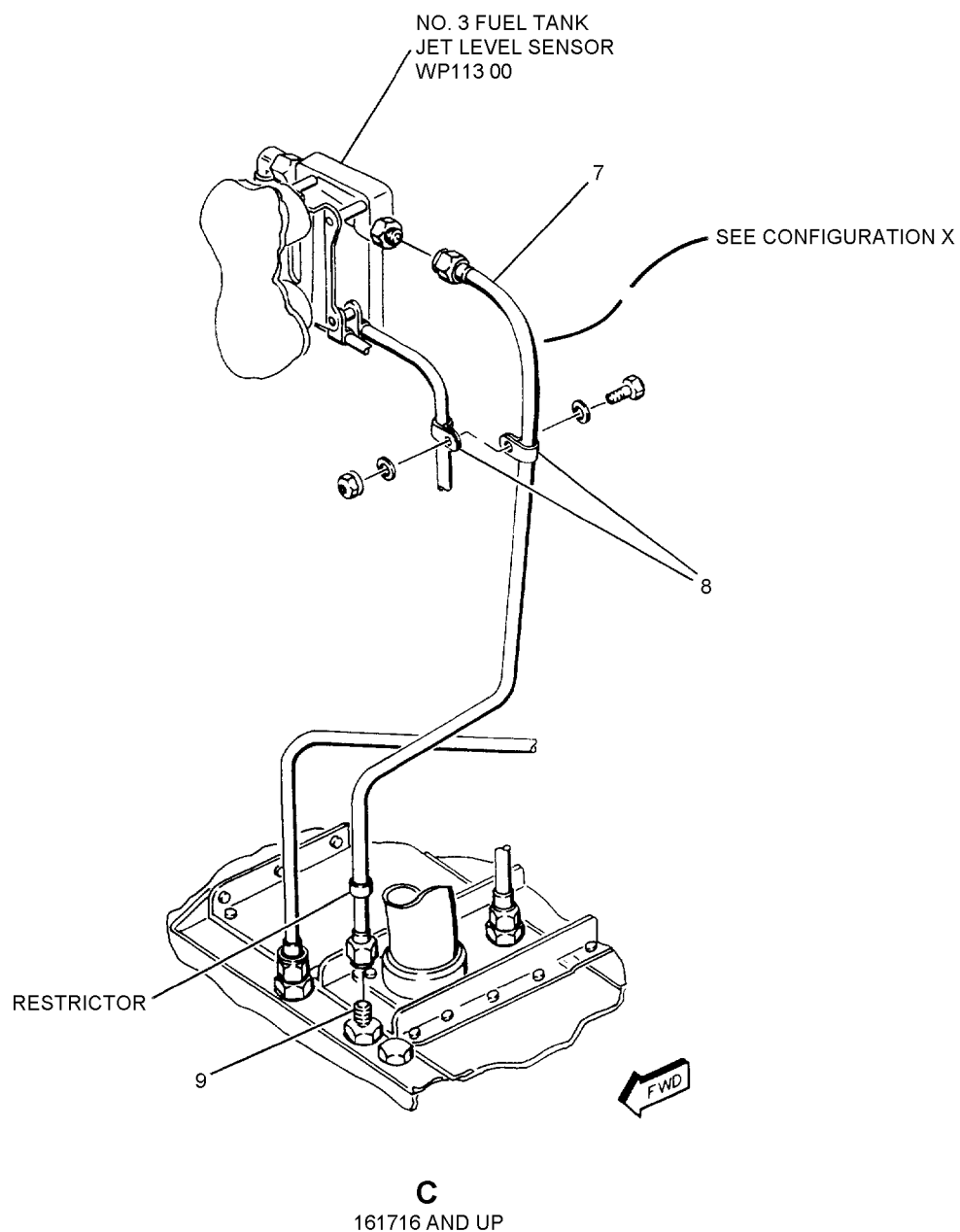
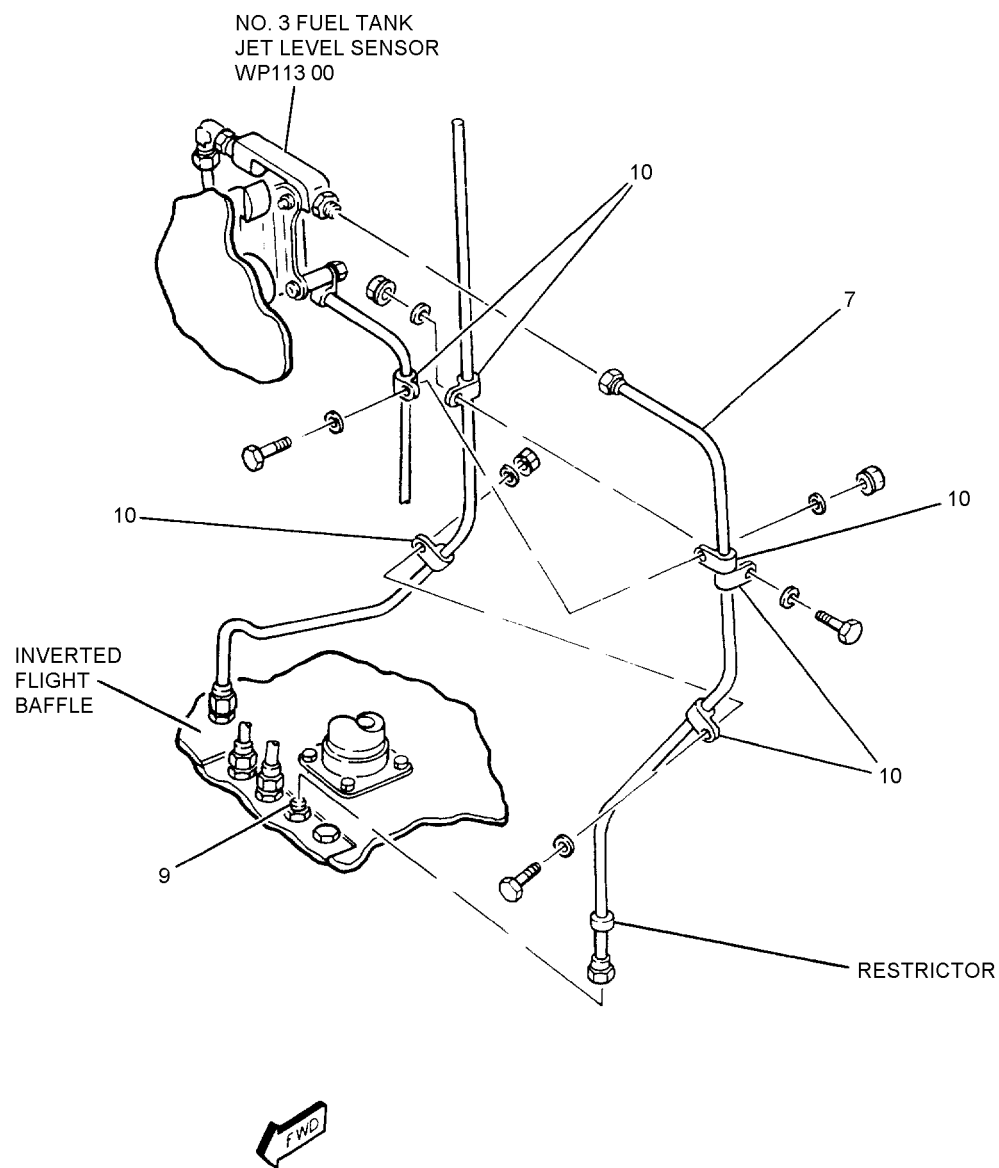


Figure 5. No. 3 Fuel Tank Level Sensor Tube Restrictor (5RAP668) (Sheet 3)



CONFIGURATION X
161353 THRU 161715

Figure 5. No. 3 Fuel Tank Level Sensor Tube Restrictor (5RAP668) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
1	74A586381-1001	. TUBE ASSY - CLIMB VENT, FUEL TANK NO. 3 (76301)	1		XBOOO
	NS103597-02	. NUT, SELF-LOCKING, PLATE (80539) (MCDONNELL SPEC ST3M470C3M) (USE WITH INDEX 1)	2	*	PAOZZ
	F10965-1-3	. NUT, SELF-LOCKING, PLATE (72962) (MCDONNELL SPEC ST3M470C3M) (USE WITH INDEX 1)	2	*	PAOZZ
	F29339-01-3	. NUT, SELF-LOCKING, PLATE (15653) (MCDONNELL SPEC ST3M470C3M) (USE WITH INDEX 1)	2	*	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
2	MS29513-230	. PACKING	2		PAOZZ
3	W901K40DE	. COUPLING, CLAMP, GROOVE (79326) (MCDONNELL SPEC 7M765-40D) (INCLUDES SLEEVE)	1		PAOZZ
	14J12-40A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-40D) (INCLUDES SLEEVE)	1		PAOZZ
	W901F40DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-40D) (INCLUDES SLEEVE)	1	*	PAOZZ
4	74A586321-1011	. VENT ASSEMBLY FUEL TANK NO. 3 (NO. 3 FUEL TANK DIVE VENT CHECK VALVE (76301) (5VAP582)	1		PAOZZ
	74A585003-2001	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	*	PAOZZ
5	NAS673V4	. BOLT	3		PAOZZ
	4M36-01016	. WASHER (76301) (USE WITH INDEX 5)	6		PAOZZ
	NAS43DD3-8	. SPACER (USE WITH INDEX 5)	3		PAOZZ
6	74A586297-2001	. GUIDE, PROBE - FUEL QTY, TANK 2 & 3 (76301)	1		XBOZZ
7	74A586354-1001	. TUBE ASSEMBLY, METAL - JET LEVEL SENSOR, FUEL TK NO. 3 (NO. 3 FUEL TANK FUEL LEVEL SENSOR TUBE RESTRICTOR) (76301) (5RAP668)	1		XBOZZ
8	MS25281-R6	. CLAMP (SUPERSEDES MS25281-6)	2	B	PAOZZ
	NAS673V4	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
	NAS1291C3M	. NUT (AP)	1		PAOZZ
9	7M637BW-6D	. NIPPLE (76301)	1		PAOZZ
10	M525281-R6	. CLAMP (SUPERSEDES M525281-6)	6	A	PAOZZ
	NA5673V4	. BOLT	3		PAOZZ
	AN960JD10L	. WASHER (AP)	3		PAOZZ
	NAS1291C3M	. NUT (AP)	3		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

Figure 5. No. 3 Fuel Tank Level Sensor Tube Restrictor (5RAP668) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

CODE	USABLE ON	MODEL
A	161353 THRU 161715	F/A-18A/B
B	161716 & UP	F/A-18A/B

Figure 5. No. 3 Fuel Tank Level Sensor Tube Restrictor (5RAP668) (Sheet 6)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

FUEL/AIR HEAT EXCHANGER OR MANIFOLD (5MPP670 OR 5MPR671)

HOT FUEL RECIRCULATION SYSTEM

EFFECTIVITY: 161520 AND UP; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 21

Reference Material

Fuel System	A1-F18AC-460-200
Hot Fuel Recirculation Test	WP015 00
Aircraft Corrosion Control	A1-F18AC-SRM-500
Aft Center Fuselage Seals and Sealing	WP032 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Piping Installation Manual	A1-F18AC-PIM-000

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Inspection	2
Installation	2
Removal	2
Fuel/Air Heat Exchanger Manifold	3
Installation	5
Removal	4
Illustrated Parts Breakdown	6

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 21	-	Addition of Fuel/Air Heat Exchanger (ECP MDA-F/A-18-00033)	15 Jul 86	-
F/A-18 AFC 67	11 Oct 86	Fuel/Air Heat Replacement of (ECP MDA-F/A-18-00200)	1 Jan 87	-

1. FUEL/AIR HEAT EXCHANGER (5MPP670 OR 5MPR671).

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packings (2)	M25988/1-015
Petrolatum, Technical	VV-P-236 (CAGE 81348)
Tape, Pressure Sensitive	474 (CAGE 26066)
Tubing, 1/4 Inch Stainless Steel	Go/No-Go Gage

2. REMOVAL.

a. Make sure electrical power is off (A1-F18AC-LMM-000).

b. Tag aircraft external power receptacle with an applicable warning to indicate external power is not to be applied to the aircraft.

c. Open door 10R (A1-F18AC-LMM-010).

d. On no. 5 circuit breaker panel assembly (figure 1, sheet 1), open F EXT circuit breaker.

e. Close left and right engine fuel shutoff valves per substeps below:

(1) Apply battery power (A1-F18AC-LMM-000).

(2) On LH and RH advisory and threat warning indicator panel, push L and R engine FIRE warning lights.

(3) Remove battery power (A1-F18AC-LMM-000).

(4) On no. 5 circuit breaker panel assembly, open L and R FUEL S/O VALVE circuit breakers.

(5) In MLG wheelwell, visually inspect to make sure engine fuel shutoff valve manual override arm in the CLOSED (-) position (figure 1, sheet 2).

f. Remove sealing compound between fuel/air heat exchanger (2, figure 1, sheet 3) and missile fairing.

g. Remove screws (3).

NOTE

If fuel/air heat exchanger is extremely difficult to remove, fuel/air heat exchanger manifold may be removed, to aid removal of fuel/air heat exchanger.

h. Remove fuel/air heat exchanger manifold (4) as required (paragraph 6).

i. Remove fuel/air heat exchanger (2) and packings (1).

3. INSPECTION.

a. Inspect fuel/air heat exchanger (2, figure 1, sheet 3) for fins that are bent or touching other fins.

NOTE

Fuel/air heat exchanger can have 10% of fins bent or touching other fins. Fuel/air heat exchanger has approximately 8,800 fins, which indicates that approximately 880 fins can be bent or touching other fins and the fuel/air heat exchanger is acceptable.

b. Damaged fins that are accessible, and can be straightened to original shape, should be straightened and not counted as being damaged.

c. If fuel/air heat exchanger has more than the acceptable number of fins bent or touching other fins, fuel/air heat exchanger must be replaced.

4. INSTALLATION.

a. Inspect fuel/air heat exchanger per paragraph 3.

NOTE

Make sure corrosion prevention of fasteners and attaching parts is done during installation (A1-F18AC-LMM-000).

b. Make sure electrical power is off (A1-F18AC-LMM-000).



Petrolatum

1

c. Lubricate packings (1, figure 1, sheet 3) with petrolatum.

d. Install packings (1).

e. Install fuel/air heat exchanger manifold (4) as required (paragraph 7).



To prevent damage to fuel/air heat exchanger and/or manifold, fuel/air heat exchanger must be aligned with fittings on manifold.

f. Position fuel/air heat exchanger (2). If fuel/air heat exchanger aligns with manifold (4), do substeps below:

(1) Insert mirror into air inlet until manifold (1, figure 2, sheet 1) and fuel/air heat exchanger tubes can be seen.



To prevent damage to fuel/air heat exchanger and manifold, causing possible fuel leaks, do not force Go/No-Go gage between manifold and heat exchanger.

(2) Insert Go/No-Go gage between manifold (1) and fuel/air heat exchanger tubes.

(3) If gage fits, there is not enough tube penetration into manifold (1). Remove fuel/air heat exchanger manifold per paragraph 6 and install per paragraph 7.

(4) If gage does not fit, there is enough tube penetration into manifold (1). Remove mirror and Go/No-Go gage, then install screws (3, figure 1, sheet 3).

g. If fuel/air heat exchanger (2) does not align with manifold (4), do substeps below:

(1) Remove fuel/air heat exchanger manifold per paragraph 6.

(2) Install fuel/air heat exchanger manifold per paragraph 7.

(3) If fuel/air heat exchanger (2) still does not align with fuel/air heat exchanger manifold (4), blend missile fairing a maximum of 0.09 inch to eliminate interference (A1-F18AC-SRM-250).

h. Remove no power tag from external power receptacle.

i. Open left and right engine fuel shutoff valve per substeps below:

(1) In door 10R, on no. 5 circuit breaker panel assembly (figure 1, sheet 1), close L and R FUEL S/O VALVE circuit breaker.

(2) Apply battery power (A1-F18AC-LMM-000).

(3) On LH and RH advisory and threat warning indicator panel, release L and R engine FIRE warning lights.

(4) Remove battery power (A1-F18AC-LMM-000).

j. On no. 5 circuit breaker panel assembly, close F EXT circuit breaker and close door 10R (A1-F18AC-LMM-010).

k. Do fuel leak test (A1-F18AC-LMM-000).

l. Seal area between fuel/air heat exchanger (2, figure 1) and missile fairing (A1-F18AC-SRM-500, WP032 00).

m. Do hot fuel recirculation test (A1-F18AC-460-200, WP015 00).

5. FUEL/AIR HEAT EXCHANGER MANIFOLD.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Brush, 1/4 to 1/2 Inch, Paint Type	-
Cheesecloth	CCC-C-440, Type 1, Class 1 (CAGE 81348)
Isopropyl Alcohol	TT-I-735
Petrolatum, Technical	VV-P-236 (CAGE 81348)
Scraper, Plastic or Wood	-
Sealing Compound	MIL-S-8802 Type 2, Class A-1/2 (CAGE 81349)
Tape, Pressure Sensitive	474 (CAGE 26066)
Tubing, 1/4 Inch	Inspection Mirror Extension
Tubing, 1/4 Inch Stainless Steel	Go/No-Go Gage

6. REMOVAL.

a. Make sure electrical power is off (A1-F18AC-LMM-000).

b. Tag aircraft external power receptacle with applicable warning to indicate external power is not to be applied to the aircraft.

c. Open door 10R (A1-F18AC-LMM-010).

d. On no. 5 circuit breaker panel assembly (figure 1) open F EXT circuit breaker.

e. Close left and right engine fuel shutoff valves per substeps below:

(1) Apply battery power (A1-F18AC-LMM-000).

(2) On LH and RH advisory and threat warning indicator panel, push L and R engine FIRE warning lights.

(3) Remove battery power (A1-F18AC-LMM-000).

(4) On no. 5 circuit breaker panel assembly, open L and R FUEL S/O VALVE circuit breakers.

(5) In MLG wheelwell, visually inspect to make sure engine fuel shutoff valve manual override arm is in the CLOSED (-) position (figure 1, sheet 2).

f. Open door 53L or 53R as applicable (A1-F18AC-LMM-010).

g. Remove tube (3, figure 2) (A1-F18AC-PIM-000).

h. Remove tube (4) with elbow (5) (A1-F18AC-PIM-000).

NOTE

Tube (7, figure 2, sheet 2) may need to be disconnected to remove manifold (1, sheet 1) from aircraft.

i. Remove bolts (2), washers, and try to remove manifold (1). If manifold (1) cannot be removed, go to step j.



Titanium alloy tubes will break if excessively flexed or twisted during component removal or installation.

j. If manifold (1) could not be removed in step i, do substeps below:

(1) Disconnect tube (7, detail A) at pressure quick disconnect (11).

(2) Remove cap (9) from pressure quick disconnect (11).

(3) Remove screws (10) washers and pressure quick disconnect (11).

(4) Slightly move tube (7) and remove manifold (1).

k. Remove sealing compound from manifold (1, sheet 1).

l. Remove packings (1, figure 1, sheet 3) through manifold mounting hole (figure 2) in door 53L or 53R.

7. INSTALLATION.

NOTE

Make sure corrosion prevention of fasteners and attaching parts is done during installation (A1-F18AC-LMM-000).

a. Make sure electrical power is off (A1-F18AC-LMM-000).

b. Using plastic scraper, remove sealing compound from structure.

c. If installing same manifold (1, figure 2), remove sealing compound from manifold using plastic scraper.

d. Prepare mating surface of manifold (1) and structure for electrical bond (A1-F18AC-LMM-000).



Isopropyl Alcohol

2

e. Using cheesecloth moistened with isopropyl alcohol, clean mating edge of structure and manifold (1). Wipe area with clean, dry cheesecloth before isopropyl alcohol evaporates. Repeat procedure until no visible contamination remains.



Petrolatum

1

f. Lubricate packings (1, figure 1, sheet 3) with petrolatum and install.

g. Temporarily position manifold (1) in aircraft.

h. Insert mirror into air inlet until manifold (1, figure 2, sheet 1) and fuel/air heat exchanger tubes can be seen.



To prevent damage to fuel/air heat exchanger and manifold, causing possible fuel leaks, do not force Go/No-Go gage between manifold and heat exchanger.

i. Insert Go/No-Go gage between the manifold (1) and fuel/air heat exchanger tubes.

j. If gage fits, there is not enough tube penetration into manifold (1). Do substeps below:

(1) Remove manifold (1).

(2) Peel shims (12, sheet 3) from manifold (1) until Go/No-Go gage will not pass between fuel/air heat exchanger tubes and manifold (1).

(3) Install manifold (1, sheet 1), bolts (2) and washers.

k. If the Go/No-Go gage does not fit, there is enough tube penetration into the manifold (1). Install manifold (1), bolts (2), and washers.



Sealing Compound

3

l. Apply a brush coat of sealing compound around periphery of mating surfaces of structure and manifold (1).

m. Install tube (4) and elbow (5) (A1-F18AC-PIM-000).

n. Install tube (3) (A1-F18AC-PIM-000).

o. If pressure quick disconnect (11, detail A) was removed, do substeps below:

(1) Install pressure quick disconnect (11), screws (10) and washers.

(2) Install cap (9) on pressure quick disconnect (11).



Titanium alloy tubes will break if flexed or twisted excessively during component removal or installation.

(3) Connect tube (7) at pressure quick disconnect (11).

p. Remove no power tag from external power receptacle.

q. Open left and right engine fuel shutoff valve per substeps below:

(1) In door 10R, on no. 5 circuit breaker panel assembly (figure 1, sheet 1), close L and R FUEL S/O VALVE circuit breaker.

(2) Apply battery power (A1-F18AC-LMM-000).

(3) On LH and RH advisory and threat warning indicator panel, release L and R engine FIRE warning lights.

(4) Remove battery power (A1-F18AC-LMM-000).

r. On no. 5 circuit breaker panel assembly, close F EXT circuit breaker and close door 10R (A1-F18AC-LMM-010).

s. Do fuel leak test (A1-F18AC-LMM-000).

t. Apply external hydraulic power to system 1 or 2 for 5 minutes with external power source set to TEST STAND RESERVOIR (A1-F18AC-LMM-000).

u. Do hot fuel recirculation test (A1-F18AC-460-200, WP015 00).

v. Remove external hydraulic power (A1-F18AC-LMM-000).

w. Install door 10R, 53L or 53R as applicable (A1-F18AC-LMM-010).

8. ILLUSTRATED PARTS BREAKDOWN.

9. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

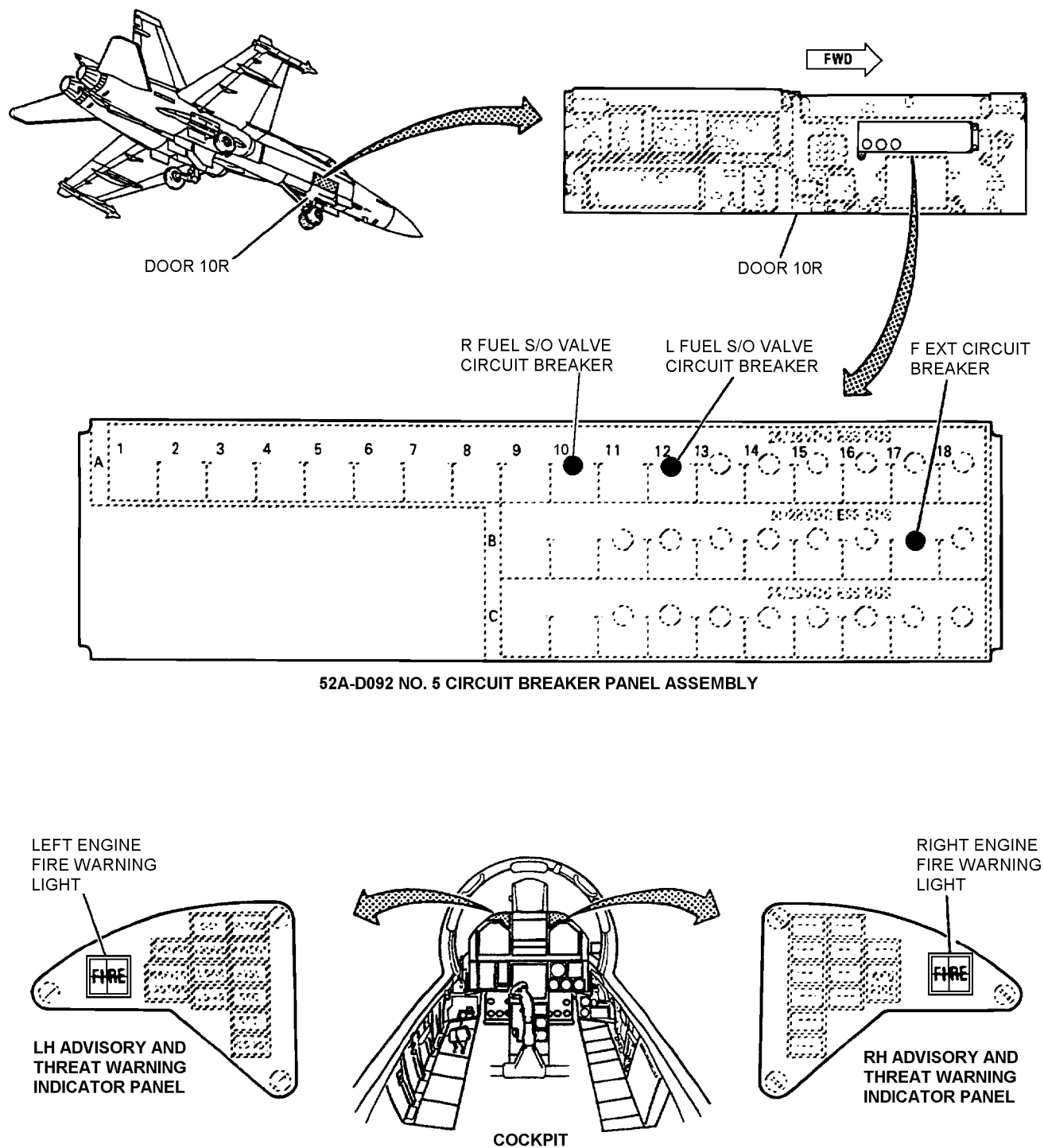


Figure 1. Fuel/Air Heat Exchanger (5MPP670 or 5MPR671) (Sheet 1)

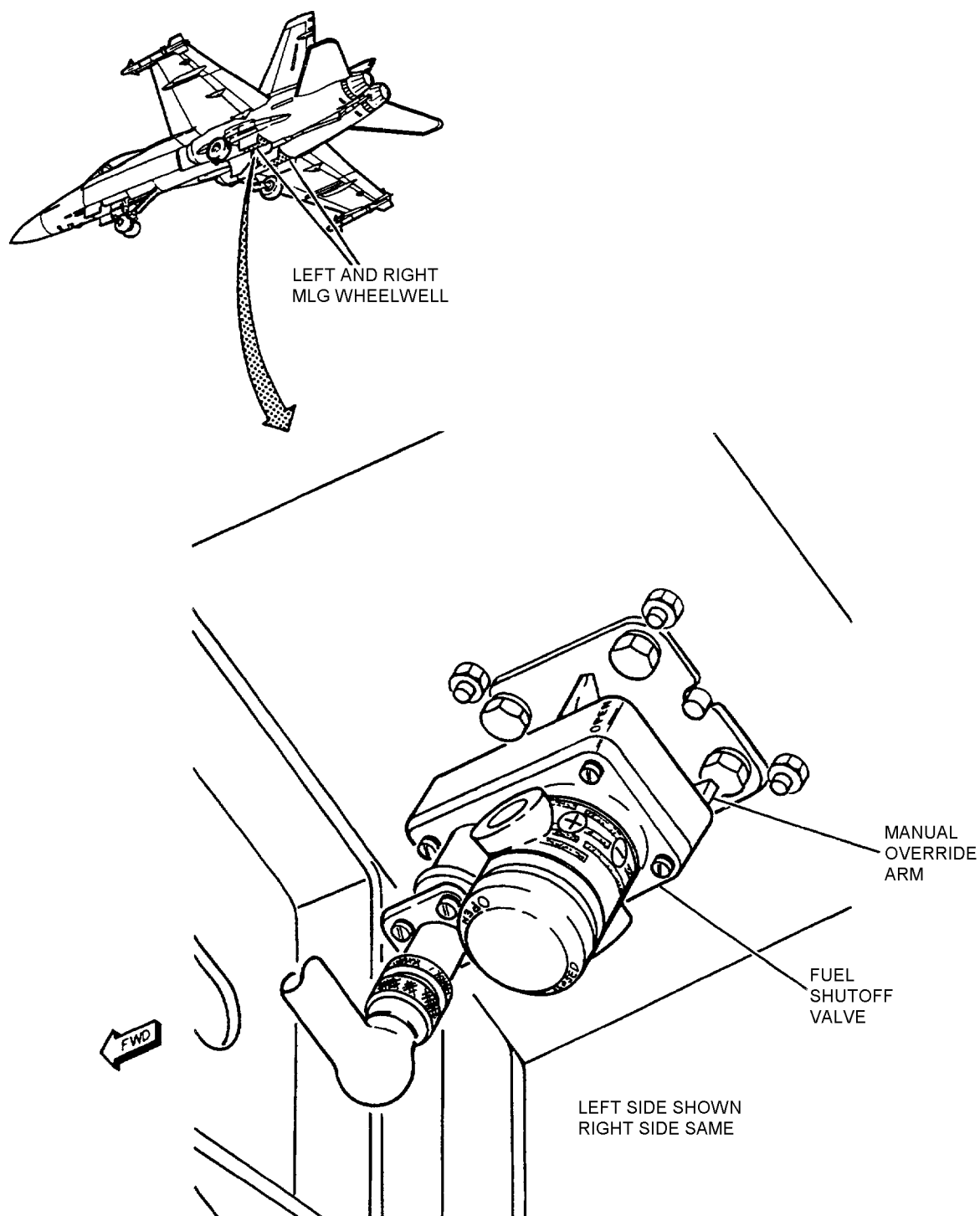


Figure 1. Fuel/Air Heat Exchanger (5MPP670 or 5MPR671) (Sheet 2)

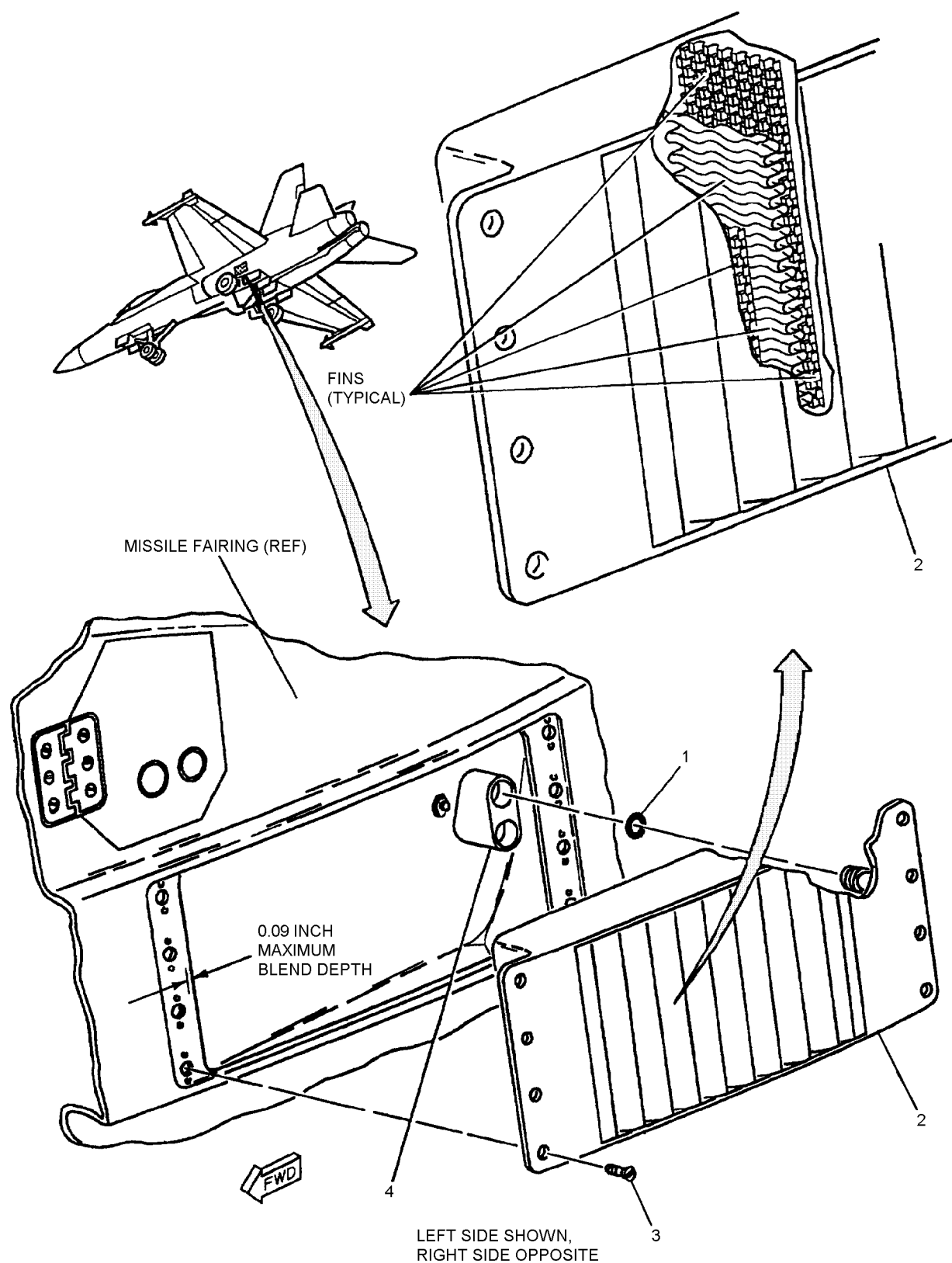


Figure 1. Fuel/Air Heat Exchanger (5MPP670 or 5MPR671) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		FUEL/AIR HEAT EXCHANGER (5MPP670 OR 5MPR671)									
1	M259881-015	.	PACKING						2		PAOZZ
2	13451-000	.	HEAT EXCHANGER, FUEL/AIR (FUEL/AIR HEAT EXCHANGER) (12536)						1		PAOZZ
			(MCDONNELL SPEC 74-540061-101)								
			(5MPP670 OR 5MPR671)								
	12451-000	.	HEAT EXCHANGER, FUEL/AIR (FUEL/AIR HEAT EXCHANGER) (12536)						1	*	PAOZZ
			(MCDONNELL SPEC 74-540061-101)								
			(5MPP670 OR 5MPR671)								
3	HT4025L3-6	.	SCREW, CLOSE TOLERANCE (73197)						8		PAOZZ
			(MCDONNELL SPEC ST3M454-3L6)								
4	74A587040-1001	.	MANIFOLD ASSEMBLY - FUEL AIR HEAT EXCHANGER (76301) (LEFT SIDE)						1		PAOZZ
			(REPLACES 74A587039-1001, 74A587039-1003, 74A587039-1005)								
	74A587039-1005	.	SEE ABOVE (REPLACES 74A587039-1001, 74A587039-1003) (USE UNTIL EXHAUSTED)						1	B	PAOZZ
	74A587039-1001	.	SEE ABOVE (USE UNTIL EXHAUSTED)						1	A*	PAOZZ
	74A587039-1003	.	SEE ABOVE (USE UNTIL EXHAUSTED)						1	A*	PAOZZ
	74A587040-1002	.	MANIFOLD ASSEMBLY - FUEL AIR HEAT EXCHANGER (76301) (RIGHT SIDE)						1		PAOZZ
			(REPLACES 74A587039-1002, 74A587039-1004, 74A587039-1006)								
	74A587039-1006	.	SEE ABOVE (REPLACES 74A587039-1002, 74A587039-1004) (USE UNTIL EXHAUSTED)						1	B	PAOZZ
	74A587039-1002	.	SEE ABOVE (USE UNTIL EXHAUSTED)						1	A	PAOZZ
	74A587039-1004	.	SEE ABOVE (USE UNTIL EXHAUSTED)						1	A	PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161520 THRU 161987 BEFORE F/A-18 IAFC 067	F/A-18A/B
B	162394 THRU 162909; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 21 AND 161520 THRU 161987 AFTER F/A-18 IAFC 067	F/A-18A/B

Figure 1. Fuel/Air Heat Exchanger (5MPP670 or 5MPR671) (Sheet 4)

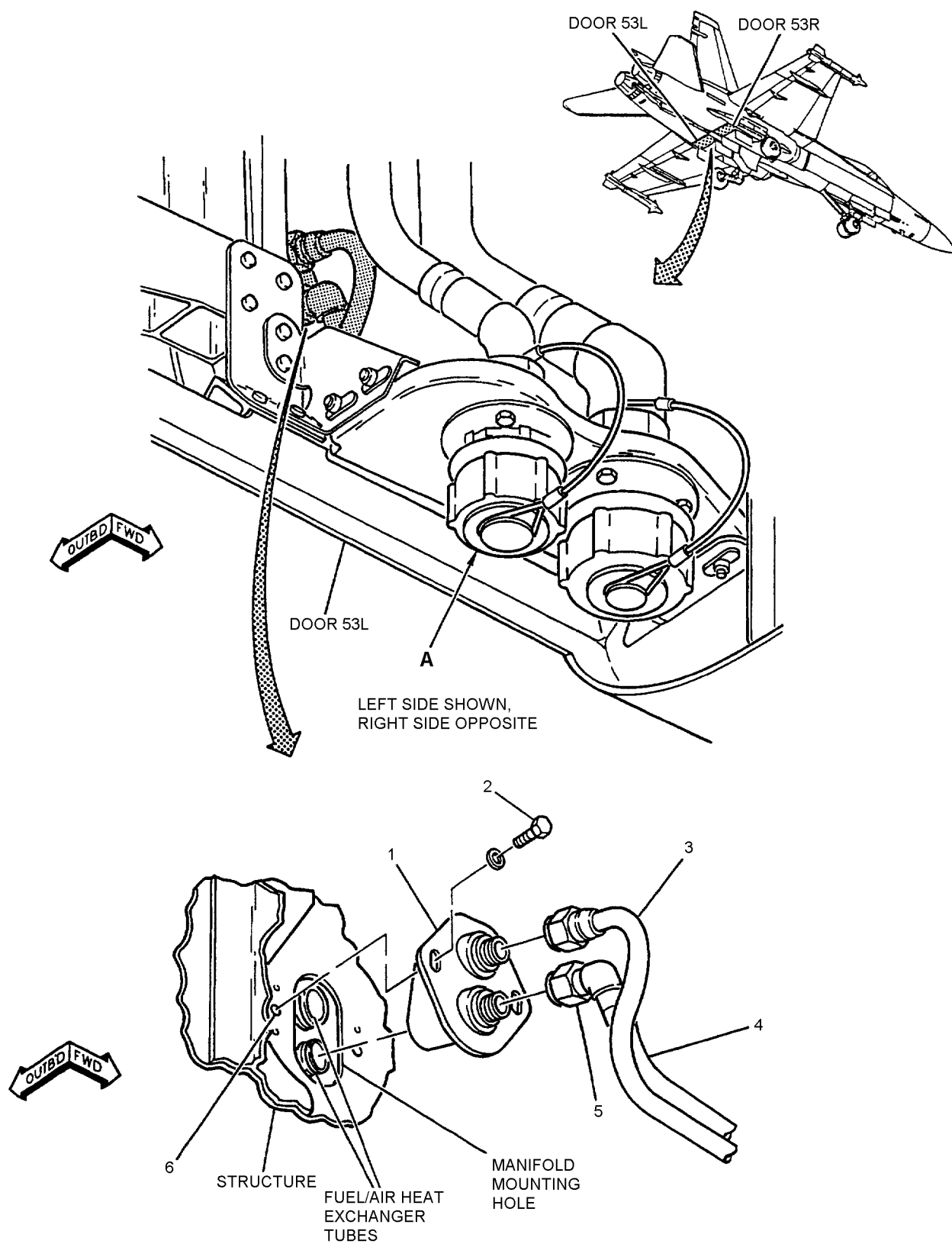


Figure 2. Fuel/Air Heat Exchanger Manifold (Sheet 1)

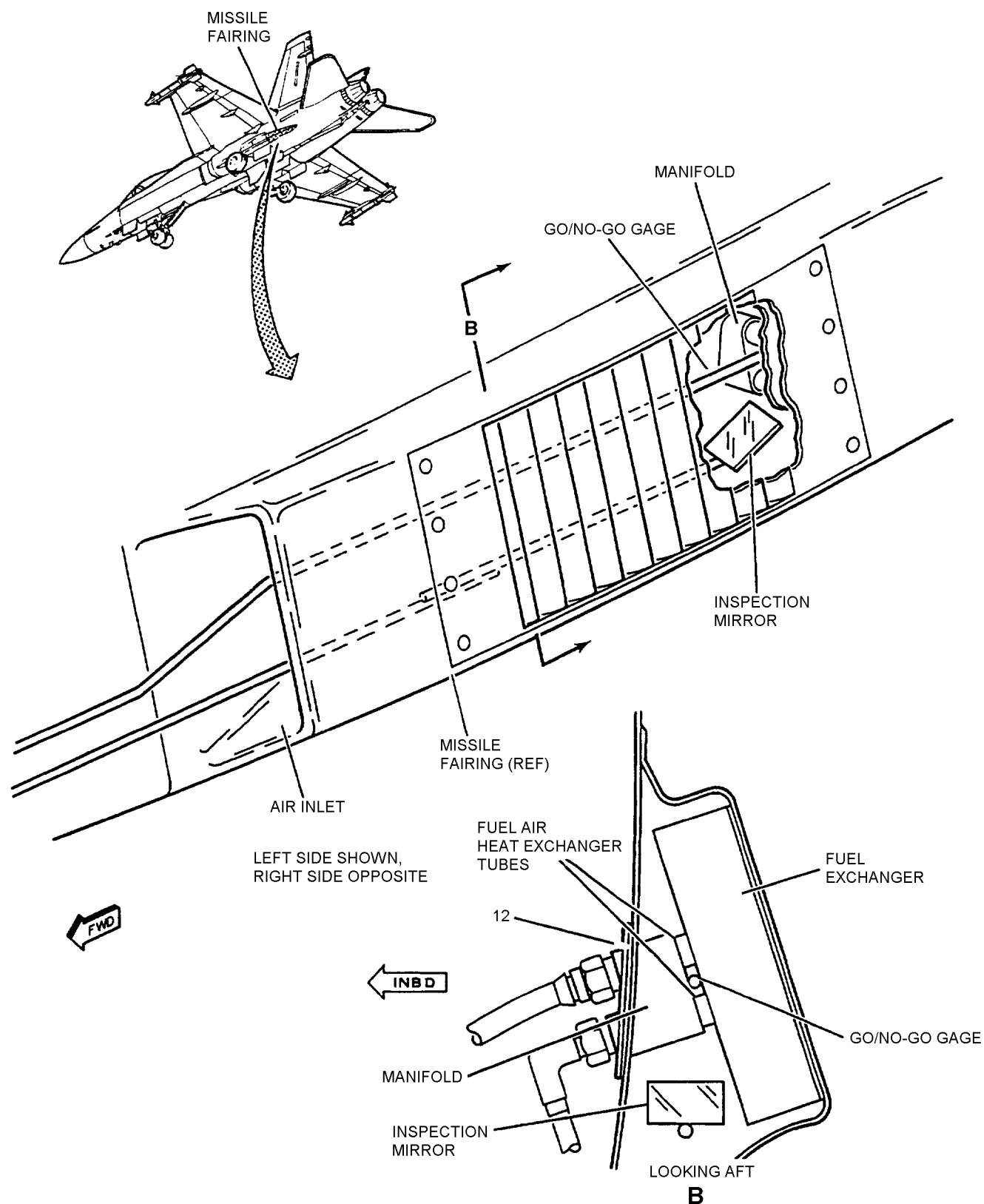


Figure 2. Fuel/Air Heat Exchanger Manifold (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
1	74A587040-1001	FUEL/AIR HEAT EXCHANGER MANIFOLD MANIFOLD ASSEMBLY - FUEL AIR HEAT EXCHANGER (FUEL/AIR HEAT EXCHANGER MANIFOLD) (76301) (LEFT SIDE) (REPLACES 74A587039-1001, 74A587039-1003, 74A587039-1005)	1		PAOZZ
	74A587039-1005	. SEE ABOVE (REPLACES 74A587039-1001, 74A587039-1003) (USE UNTIL EXHAUSTED)	1	D	PAOZZ
	74A587039-1001	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	A*	PAOZZ
	74A587039-1003	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	A*	PAOZZ
	74A587040-1002	. MANIFOLD ASSEMBLY - FUEL AIR HEAT EXCHANGER (FUEL/AIR HEAT EXCHANGER MANIFOLD) (76301) (RIGHT SIDE) (REPLACES 74A587039-1002, 74A587039-1004, 74A587039-1006)	1		PAOZZ
	74A587039-1006	. SEE ABOVE (REPLACES 74A587039-1002, 74A587039-1004) (USE UNTIL EXHAUSTED)	1	D	PAOZZ
	74A587039-1002	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	A*	PAOZZ
	74A587039-1004	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	A*	PAOZZ
2	NAS673V3	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
3	74A587035-1003	. TUBE ASSEMBLY, METAL - PRESSURE, Y539.512 (76301) (LEFT SIDE)	1		XBOZZ
	74A587030-1001	. TUBE ASSEMBLY, METAL - PRESSURE, Y539.500 (76301) (RIGHT SIDE)	1		XBOZZ
4	74A587027-1003	. TUBE ASSEMBLY, METAL PRESSURE, Y537.951 (76301) (LEFT SIDE)	1		XBOZZ
	74A587032-1001	. TUBE ASSEMBLY, METAL PRESSURE, Y538.010 (76301) (RIGHT SIDE)	1		XBOZZ
5	D11009TE06	. ELBOW, TUBE (14798) (MCDONNELL SPEC ST7M432T6)	1		PAOZZ
6	F49249E3-1	. NUT, SELF-LOCKING, PLATE (15653) (MCDONNELL SPEC ST3M443-3A1)	2	*	PAOZZ
	F18421L1-3	. NUT, SELF-LOCKING, PLATE (72962) (MCDONNELL SPEC ST3M443-3A1)	2	*	PAOZZ
	NS202041-02-1	. NUT, SELF-LOCKING PLATE (80539) (MCDONNELL SPEC ST3M443-3A1)	2	*	PAOZZ
	BFN443-3-1	. NUT, SELF-LOCKING PLATE (27238) (MCDONNELL SPEC ST3M443-3A1)	2	*	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
7	74A695535-1005	. TUBE ASSEMBLY, METAL - 1 PRESS, Y541.198 (76301) (LEFT SIDE)	1		PAOZZ
	74A695536-1005	. TUBE ASSEMBLY, METAL - 2 PRESS, Y541.287 (76301) (RIGHT SIDE)	1		PAOZZ
8	74A695385-1009	. BRACKET - HYDR SYS SUPPORT LH (76301) (LEFT SIDE)	1		XBOZZ
	74A695384-1001	. BRACKET - HYDR SYS SUPPORT RH (76301) (RIGHT SIDE)	1		XBOOO
9	AE81830KL4	. CAP, QUICK DISCONNECT (00624) (INCLUDES 9M59-3-900 WIRE ROPE) (MCDONNELL SPEC ST7M292D12A14)	1	B	PAOZZ

Figure 2. Fuel/Air Heat Exchanger Manifold (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
	AE96863K14	. CAP, QUICK DISCONNECT (00624) (INCLUDES 9M59-3-900 WIRE ROPE) (MCDONNELL SPEC ST7M292D12-14)	1	C	PAOZZ
10	NAS1801-3-2	. SCREW	3		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 11)	3		PAOZZ
11	AE96434K	. COUPLING HALF, QUICK DISCONNECT (PRESSURE QUICK DISCONNECT) (00624) (MCDONNELL SPEC ST7M291-4)	1		PAOZZ
12	74A587040-2005	. SHIM (76301)	1		PAOZZ

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161520 THRU 161987 BEFORE F/A-18 IAFC 067	F/A-18A/B
B	161353 THRU 161711	F/A-18A/B
C	161712 & UP	F/A-18A/B
D	162394 THRU 162909; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 21 AND 161520 THRU 161987 AFTER F/A-18 IAFC 067	F/A-18A/B

Figure 2. Fuel/Air Heat Exchanger Manifold (Sheet 5)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
FUEL/OIL HEAT EXCHANGER CHECK VALVE (5VAS523 OR 5VAT524) OR
CROSSFEED MANIFOLD
HOT FUEL RECIRCULATION SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-330
Fuel Feed Line Temperature Sensor	WP137 00
Engine Fuel Coupling Check Valve	WP140 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedure	A1-F18AC-LMM-000
Secondary Power System	A1-F18AC-240-300
Amad	WP020 00
Structure Repair Manual	A1-F18AC-SRM-500

Alphabetical Index

Subject	Page No.
Crossfeed Manifold	2
Installation	3
Removal	2
Fuel/Oil Heat Exchanger Check Valve	2
Installation	2
Removal	2
Illustrated Parts Breakdown	3

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A- 18 AFC 43	30 Sep 86	Replacement of 7M404/7M550 Fuel Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 86	-
F/A-18 IAFC 056	27 Mar 85	Fuel System Components Replacement and System Inspection (ECP MDA-F/A-1800158R1 and ECP MDA-F/A-18-00160)	15 Jul 85	-
F/A-18 IAFC 056 Amend 2	14 Oct 86	Fuel System Components Replacement and System Inspection: Cancellation of Change (Purpose: To Effect Cancellation of Refs A and B) (ECP MDA-F/A-18-00158R1 and ECP MDA-F/A-18-00160)	1 Apr 88	-

1. FUEL/OIL HEAT EXCHANGER CHECK VALVE.**WARNING****Support Equipment Required**

None

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC32 (CAGE 96906)
Packing (2)	M25988/1-017
Packing	M25988/1-910
Petrolatum, Technical	VV-P-236 (CAGE 81348)

2. REMOVAL.**NOTE**

Left side procedure shown, right side similar.

- a. Remove AMAD (A1-F18AC-240-300, WP020 00).
- b. Remove coupling (4, figure 1) (WP013 00) and remove packings (3).
- c. Remove valve (2) and packing (1).

3. INSTALLATION.

Petrolatum

1

- a. Lubricate new packings with petrolatum.
- b. Install valve (2, figure 1) and packing (1).

To prevent a possible fire and/or explosion, make sure coupling is corrosion resistant steel. Both outer clamp and inner sleeve are silver-grey color.

- c. Install packings (3). Inspect, install and lockwire coupling (4) (WP013 00). (QA)
- d. Install AMAD (A1-F18AC-240-300, WP020 00).
- e. Do fuel leak test (A1-F18AC-LMM-000).
- f. Close door 53L or 53R (A1-F18AC-LMM-010).

4. CROSSFEED MANIFOLD.**Support Equipment Required**

None

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC32 (CAGE 96906)
Packing	MS29513-214
Packing (2)	M25988/1-214
Petrolatum, Technical	VV-P-236 (CAGE 81348)

5. REMOVAL.

- a. Remove AMAD (A1-F18AC-240-300, WP020 00).
- b. Remove fuel/oil heat exchanger check valve per paragraph 2.
- c. Remove engine fuel coupling check valve (WP140 00).
- d. Disconnect fuel feed line temperature sensor (WP137 00).
- e. On left side, remove coupling (5, figure 2, sheet 2) (WP013 00) and packings (4).

f. On left side, remove manifold (1).

g. On right side, remove manifold (2, sheet 3), packing (6) and attaching parts.

6. INSTALLATION.



Petrolatum

1

a. Lubricate new packings with petrolatum.

b. Prepare mating surfaces of manifold (1 or 2, figure 2), temperature sensor (WP137 00) and structure for electrical bond (A1-F18AC-LMM-000).

c. On left side, install manifold (1, sheet 2) and attaching parts.

d. On right side, install manifold (2, sheet 3), packing (6) and attaching parts.

e. Seal manifold and bulkhead by applying fire and thermal barrier coating (A1-F18AC-SRM-500, WP009 00).

f. Install engine fuel coupling check valve (WP140 00).

g. Connect temperature sensor (WP137 00).

h. On left side, install packings (4, sheet 2). Inspect, install and lockwire coupling (5) (WP013 00). (QA)

i. Install fuel/oil heat exchanger check valve per paragraph 3.

j. Install AMAD (A1-F18AC-240-300, WP020 00).

k. Do a fuel leak test (A1-F18AC-LMM-000).

l. Close door 53L or 53R (A1-F18AC-LMM-010).

7. ILLUSTRATED PARTS BREAKDOWN.

8. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

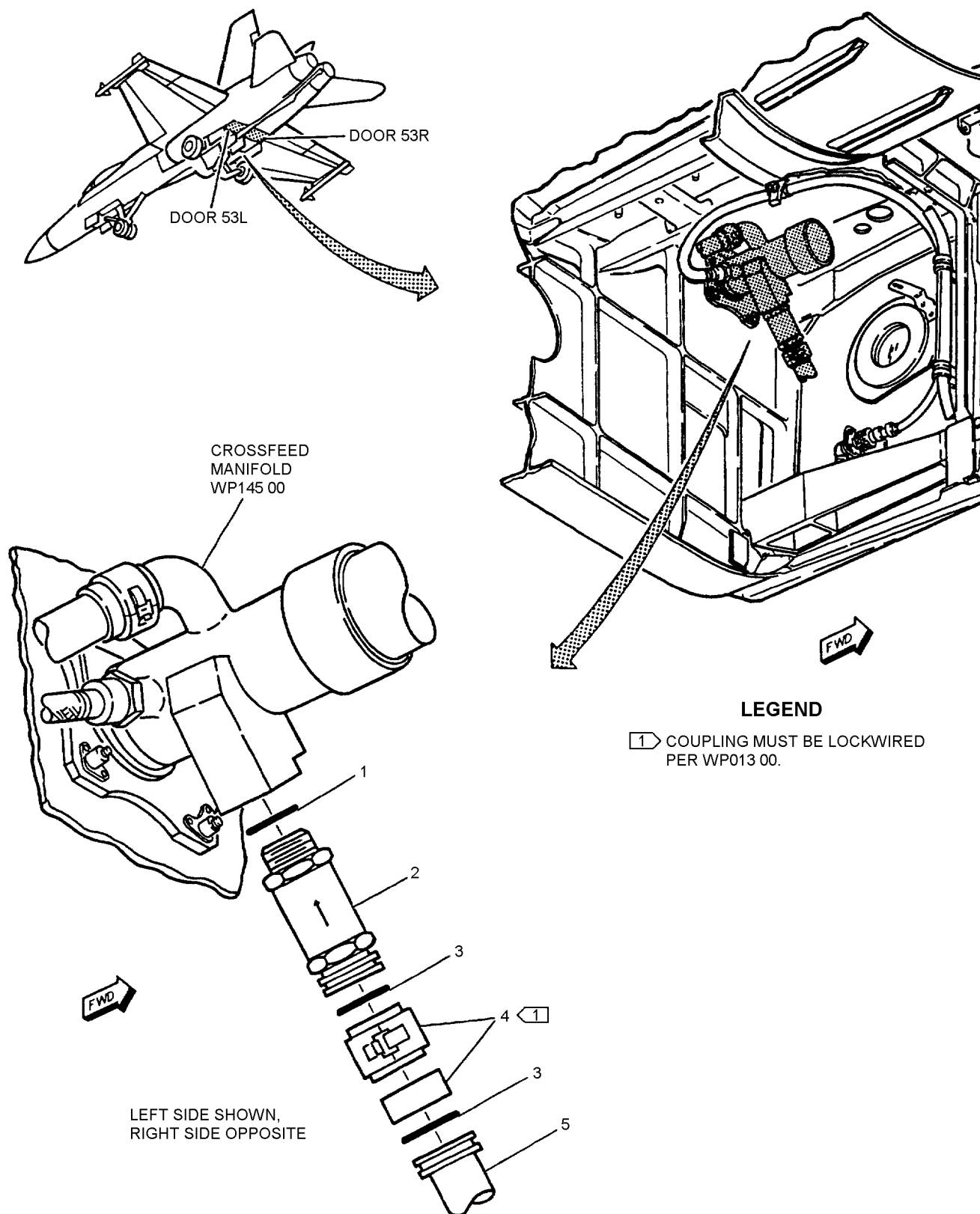


Figure 1. Fuel/Oil Exchanger Check Valve (5VAS523 or 5VAT524) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		FUEL/OIL HEAT EXCHANGER CHECK VALVE			
		(5VAS523 OR 5VAT524)			
1	M25988/1 - 910	. PACKING	1		PAOZZ
2	2S2862	. VALVE, CHECK - FUEL, SMALL LINE	1		PAOZZ
		MOUNTED (FUEL/OIL HEAT EXCHANGER CHECK VALVE) (99240) (MCDONNELL SPEC 74-580125-109) (5VAS523 OR 5VAT524)			
3	M25988/1-017	. PACKING	2		PAOZZ
4	W901K10CE	. COUPLING, CLAMP, GROOVED (79326)	1	C	PAOZZ
		(MCDONNELL SPEC 7M765-10C) (INCLUDES SLEEVE)			
	14J12-10C	. COUPLING, CLAMP, GROOVED (24984)	1	C	PAOZZ
		(MCDONNELL SPEC 7M765-10C) (INCLUDES SLEEVE)			
	W901F01CE	. SEE ABOVE (79326) (MCDONNELL SPEC	1	D*	PAOZZ
		7M550-10C)			
5	74A586937-1005	. TUBE ASSEMBLY, METAL - FUEL LINE	1		PAOZZ
		PUMP TO HEAT EXCH, LH (76301)			
	74A586937-1003	. SEE ABOVE	1	*	PAOZZ
	74A586937-1001	. SEE ABOVE	1	*	PAOZZ
	74A586936-1005	. TUBE ASSEMBLY, METAL - FUEL HEAT	1		PAOZZ
		EXCH TO FUEL PUMP RH (76301)			
	74A586936-1003	. SEE ABOVE	1	*	PAOZZ
	74A586936-1001	. SEE ABOVE	1	*	PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	DELETED	
B	DELETED	
C	161924 L UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 43	F/A-18A/B
D	161353 THRU 161761 BEFORE: F/A-18 AFC 43	F/A-18A/B

Figure 1. Fuel/Oil Exchanger Check Valve (5VAS523 or 5VAT524) (Sheet 2)

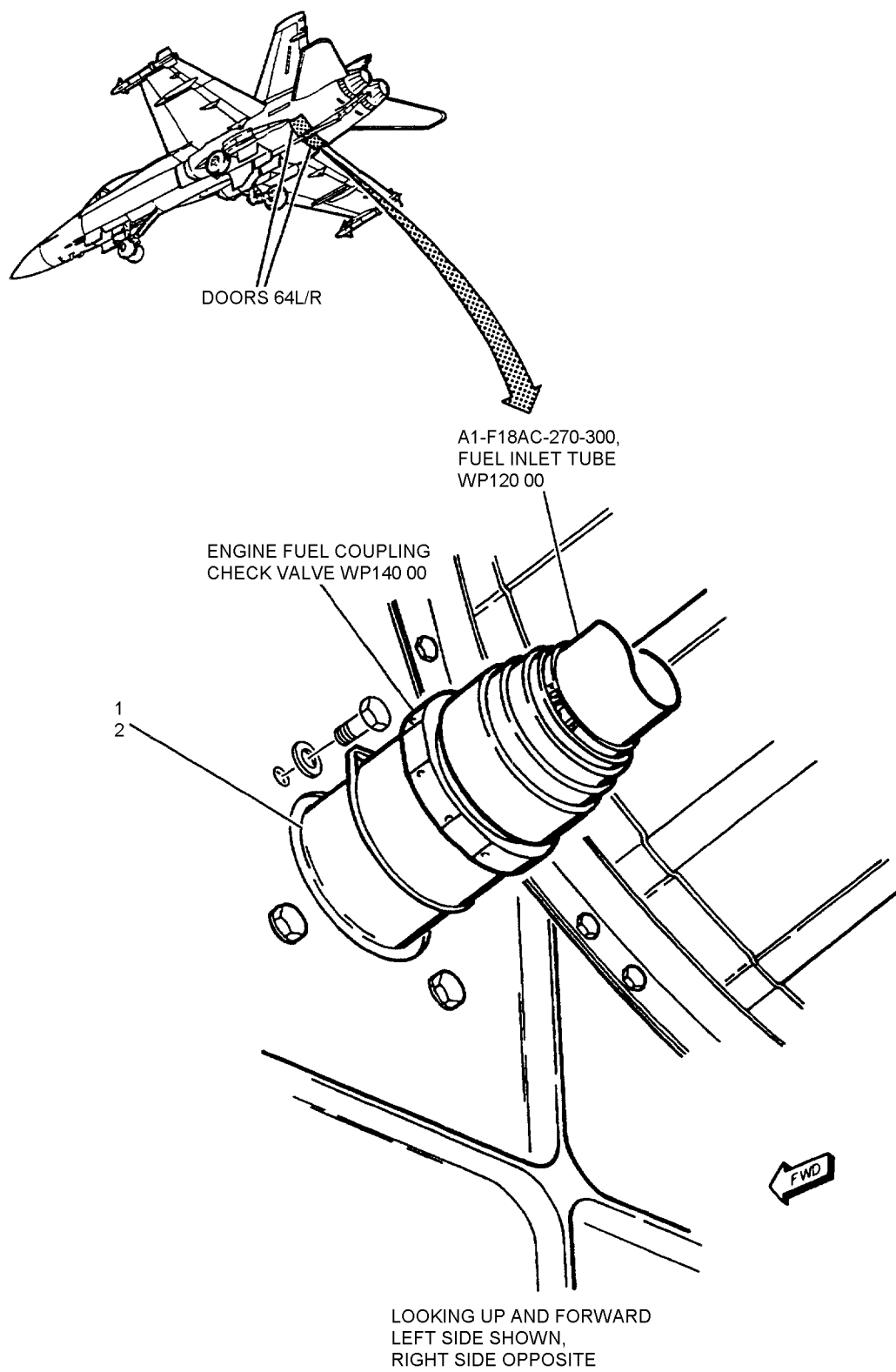


Figure 2. Crossfeed Manifold (Sheet 1)

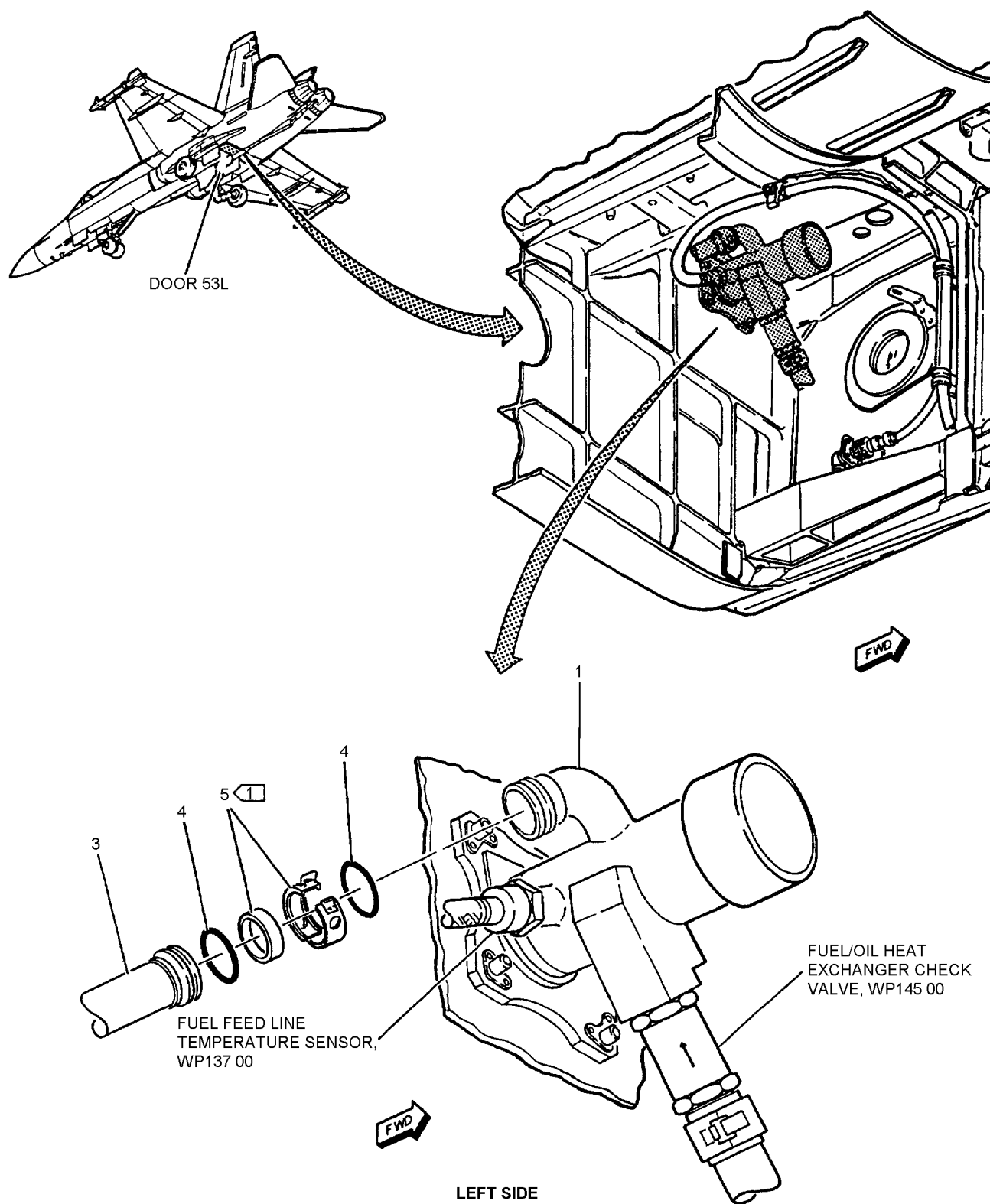
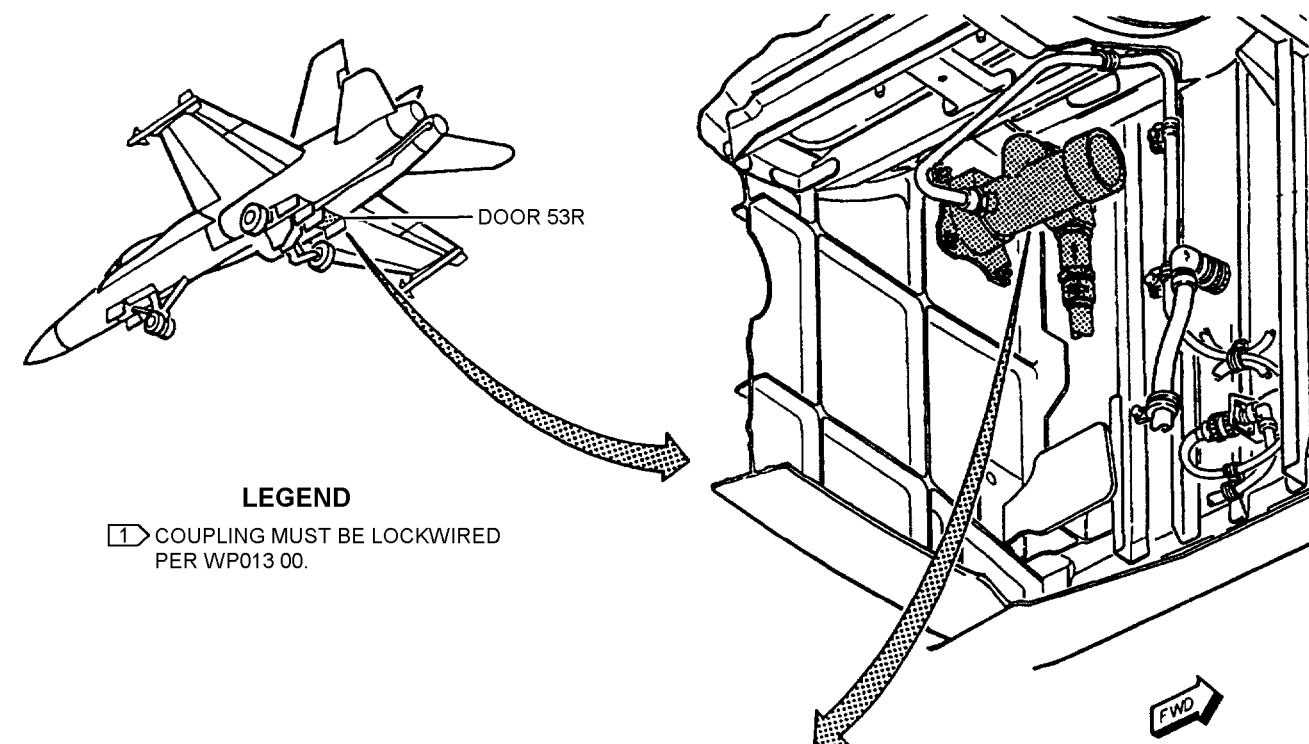


Figure 2. Crossfeed Manifold (Sheet 2)



LEGEND

- 1 COUPLING MUST BE LOCKWIRED PER WP013 00.

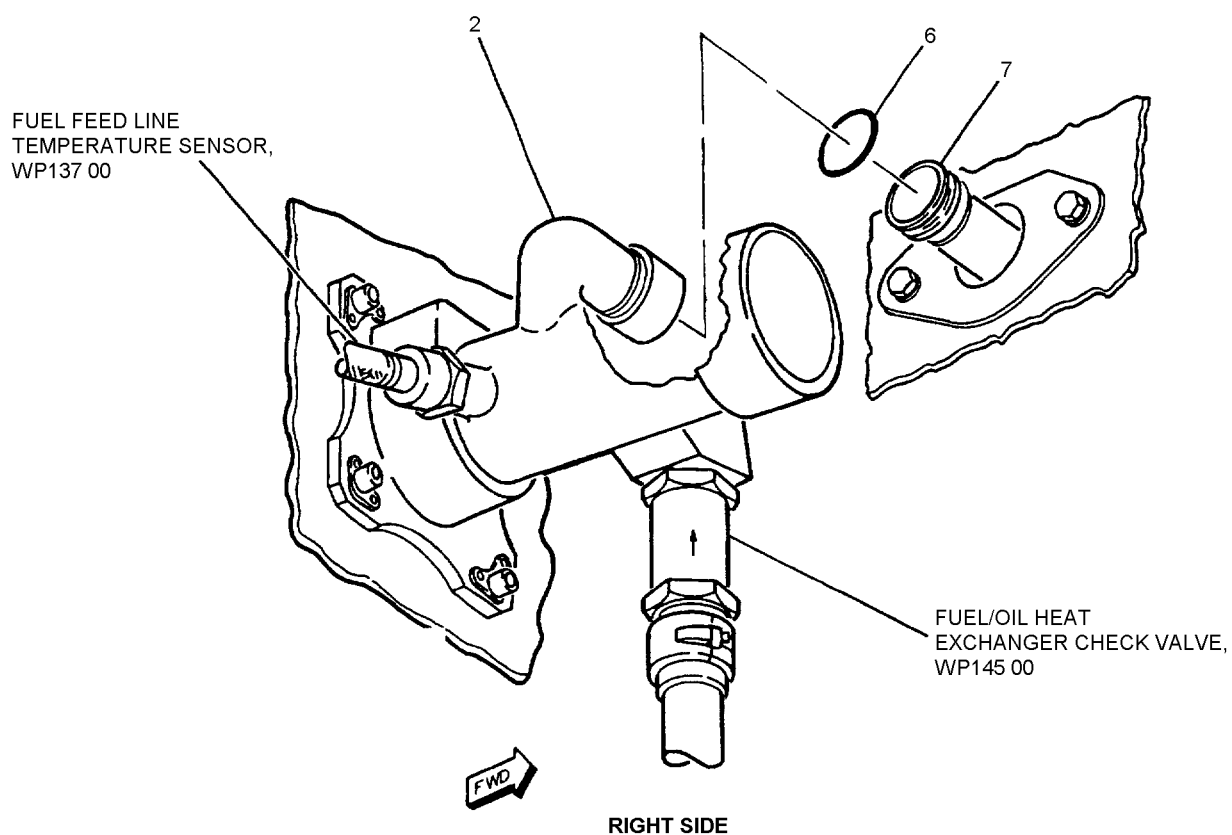


Figure 2. Crossfeed Manifold (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
1	74A586951-1013	CROSSFEED MANIFOLD MANIFOLD, FLUID, AIRCRAFT - FUEL CROSSFEED, LH (CROSSFEED MANIFOLD) (76301) (REPLACES 74A586951-1011 AND 74A586951-1009	1		PAOZZ
	74A586951-1011	. SEE ABOVE (REPLACES 74A586951-1009) (USE UNTIL EXHAUSTED)	1	*	PAOZZ
	74A586951-1009	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	*	PAOZZ
	NAS674V4	. BOLT (AP)	4		PAOZZ
	AN960JD416L	. WASHER (AP)	4		PAOZZ
2	74A586952-1019	. MANIFOLD, FLUID, AIRCRAFT - FUEL CROSSFEED, RH (CROSSFEED MANIFOLD) (76301) (REPLACES 74A586952-1017 AND 74A586952-1013	1		PAOZZ
	74A586952-1017	. SEE ABOVE (REPLACES 74A586952-1013) (USE UNTIL EXHAUSTED)	1	*	PAOZZ
	74A586952-1013	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	*	PAOZZ
	NAS674V4	. BOLT (AP)	4		PAOZZ
	AN960JD416L	. WASHER (AP)	4		PAOZZ
3	74A587005-1007 @	. TUBE ASSEMBLY, METAL CROSSFEED, FUEL LINE (76301) (REPLACES 74A587005-1003 & 74A587005-1001)	1		PAODD
	74A587005-1005 @	. SEE ABOVE	1	*	PAODD
	74A587005-1003 @	. SEE ABOVE (REPLACED BY 74A587005-1007) . . . (USE UNTIL EXHAUSTED)	1	B	PAODD
	74A587005-1001 @	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	A	PAOZZ
4	M25988-1-214	. PACKING	2		PAOZZ
5	W901K16CE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-16C) (INCLUDES SLEEVE)	1	C	PAOZZ
	14J12-16C	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-16C) (INCLUDES SLEEVE)	1	C	PAOZZ
	W901F10CE	. SEE ABOVE (79326) (MCDONNELL SPEC 7M550-10C)	1	D*	PAOZZ
6	MS29513-214	. PACKING	1		PAOZZ
7	74A586942-1009	. TUBE ASSEMBLY, METAL - FUEL CROSSFEED SHUTOFF VALVE (76301) (REPLACES 74A586942-1007 AND 74A586942-1005	1		PAOZZ
	74A586942-1007	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	*	PAOZZ
	74A586942-1005	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	*	PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

@ 74A587005-1007 IS REPLACEMENT PART FOR
ALL CROSSFEED TUBES BUT MUST BE USED
WITH IDLER AND ADDITIONAL PARTS.
REFERENCE WP136 01.

Figure 2. Crossfeed Manifold (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

CODE	USABLE ON	MODEL
A	161353 THRU 161924 BEFORE F/A-18 IAFC 056	F/A-18A/B
B	161925 THRU 162477; ALSO 161353 THRU 161924 AFTER F/A-18 IAFC 056	F/A-18A/B
C	161924 & UP; ALSO 161353 THRU 161761 AFTER F/A-1B AFC 43	F/A-18A/B
D	161353 THRU 161761 BEFORE F/A-18 AFC 43	F/A-18A/B

Figure 2. Crossfeed Manifold (Sheet 5)

**ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
FUEL DIVERTER VALVE (5L-P119 OR 5L-R118)
HOT FUEL RECIRCULATION SYSTEM**

Reference Material

Fuel System	A1-F18AC-460-300
No. 4 Fuel Tank Aft Access Cover and Tank Entry Procedure	WP008 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-330
Hot Fuel Recirculation Check Valve	WP144 00
Fuel System	A1-F18AC-460-200
Hot Fuel Recirculation System	WP015 00
Line Maintenance Procedures	A1-F18AC-LMM-000
Wiring Repair with Parts Data General Wiring Repair Procedures	A1-F18AC-WRM-000
Structural Hardware	NAVAIR 01-1A-8

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Inspection, Support Assemblies	5
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Left Fuel Diverter Valve Support, 161983 AND UP; ALSO 161353 THRU 161982 AFTER F/A-18 IAFC 017	4
Installation	4
Removal	4
Repair, Support Assemblies	5
Assembly	5
Disassembly	5
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Removal	4

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 24	4 Mar 83	Replacement of all ST7M404/7M550 Clam Shell Couplings with Improved 7M765 Fuel Couplings (ECP MDA-F/A-18-00143)	1 Mar 83	-

1. FUEL DIVERTER VALVE.

Support Equipment Required

Nomenclature	Part Number or Type Designation
Torque Wrench, 0 to 120 Inch-Pounds	-

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC32 (CAGE 96906)
Packing	MS29512-06
Packing (6)	MS29513-117
Packing	MS29513-132
Petrolatum, Technical	VV-P-236 (CAGE 81348)
Tape, Lacing	MIL-T-43435 Type 2, Size 3, Finish C (CAGE 81349)

2. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Do no. 4 fuel tank aft access cover and tank entry procedure removal (WP008 00).
- c. Remove hot fuel recirculation check valve (WP144 00).
- d. On 163146 AND UP, remove bolt (2, figure 1) with washer and disconnect electrical lead (1).
- e. Disconnect connector (3, detail A).
- f. Remove ring (4), disconnect connector (8), and remove packing (5).
- g. For replacement of left valve, disconnect RED or GRN+AA wire from pin 7, BLK or GRN - BB wire from pin 6 and WHT or GRN CC wire from pin 5 of connector (8) (A1-F18AC-WRM-000).

h. For replacement of right valve, disconnect RED or GRN+AA wire from pin 10, BLK or GRN--BB wire from pin 9 and WHT or GRN CC wire from pin 8 of connector (8) (A1-F18AC-WRM-000).

i. Attach 6 feet of lacing tape to disconnected wires.

j. Disconnect tube (6 or 7) at valve (13, detail C or detail D).

k. At valve (13), pull wires through tube (6 or 7, detail C or D) until lacing tape is visible.

l. Untie lacing tape from wires and secure string at both ends.

m. Disconnect tube (14, detail C or 21, detail D) from nipple (22).

n. Remove couplings (17), packing (18), valve (13) and attaching parts.

o. Remove nipple (22) and packing (23) from valve (13).

3. INSTALLATION.

a. Do general preparation for component installation (WP013 00).



Petrolatum

1

b. Lubricate new packings with petrolatum before installation.

c. Install packing (23, figure 1, detail D) on nipple (22) and install nipple in valve (13).

d. Prepare attaching parts of valve (13) for electrical bond (A1-F18AC-LMM-000).

e. Install valve (13) and attaching parts.

f. Untie lacing tape from end of tube (6 or 7, detail C or D) and tie string to wires.

g. From top of dorsal deck untie lacing tape and pull wires through tube (6 or 7, detail A).

h. Connect tube (6 or 7, detail C or D) to valve (13). Torque tube (6 or 7, details A, C or D) to 60 inch-pounds. (QA)

i. Connect tube (14 or 21, detail C or D).

j. Install packings (18) and couplings (17).

k. Untie lacing tape from wires (detail A).

l. If left valve was replaced, connect RED or GRN+AA wire to pin 7, BLK or GRN--BB wire to pin 6 and WHT or GRN CC wire to pin 5 of connector (8) (A1-F18AC-WRM-000).

m. If right valve was replaced, connect RED or GRN+AA wire to pin 10, BLK or GRN--BB wire to pin 9 and WHT or GRN CC wire to pin 8 of connector (8) (A1-F18AC-WRM-000).

n. Install packing (5), position connector (8) in structure and install ring (4). Make sure jamnut is safetied with lockwire.

o. On 163146 AND UP, connect electrical lead (1, figure 1) with bolt (2) and washer.

p. Connect connector (3, detail A) to connector (8).

q. Install hot fuel recirculation check valve (WP144 00).

r. Do no. 4 fuel tank aft access cover and tank entry procedure installation (WP008 00).

s. Do hot fuel recirculation system test (A1-F18AC-460-200, WP015 00).

4. LEFT FUEL DIVERTER VALVE SUPPORT, 161353 THRU 161982 BEFORE F/A-18 IAFC 017.

Support Equipment required

None

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29513-333

Materials Required (Cont)

Nomenclature	Specification or Part Number
Packing	M25988/1-312
Petrolatum, Technical	VV-P-236 (CAGE 81349)

5. REMOVAL.

a. Remove left fuel diverter valve per paragraph 2.

b. If damage is limited to support (19, figure 2, sheet 2) do substeps below:

(1) Remove support (19) attaching parts.

(2) Remove bolts (2, sheet 1) and packing (1).

c. If damage is to support (22, sheet 2), do substeps below:

(1) Remove bolts and washers attaching tube (9, sheet 1).

(2) Remove bolts and washers attaching clamps (3 and 7).

(3) Remove bolts (2 and 5) and attaching parts to remove support (22, sheet 2) with support (19).

(4) Remove packings (1 and 6, sheet 1).

6. INSTALLATION.

a. If support (19, figure 2, sheet 2) was removed do substeps below:



Petrolatum

1

(1) Lubricate new packing (1, sheet 1) with petrolatum and install.

(2) Install bolts and washers attaching support (19).

(3) Install bolts (2) and attaching parts.

b. If support (22, sheet 2) was removed do substeps below:

(1) Lubricate new packings (1 and 6, sheet 1) with petrolatum and install.

(2) Install bolts (2 and 5) and attaching parts.

(3) Install clamps (4 and 7) and attaching parts.

(4) Install tube (9) attaching parts.

c. Install fuel diverter valve per paragraph 3.

7. LEFT FUEL DIVERTER VALVE SUPPORT 161983 AND UP; ALSO 161353 THRU 161982 AFTER F/A-18 IAFC 017.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29513-333
Packing	M25988/1-312
Petrolatum, Technical	VV-P-236 (CAGE 81349)

8. REMOVAL.

a. Remove left fuel diverter valve per paragraph 2.

b. Remove support (13, figure 2) attaching parts.

c. Remove bolts and washers attaching clamps (3 and 7).

d. Remove bolts (2, 10 and 12) and attaching parts.

e. Remove packings (1 and 6).

9. INSTALLATION.



Petrolatum

1

a. Lubricate new packings (1 and 6) with petrolatum and install.

b. Install support (25, figure 2, sheet 2) with bolts (2, 10 and 12, sheet 1).

c. Install clamps (3 and 7) with attaching parts.

d. Install support (13) with attaching parts.

e. Install fuel diverter valve per paragraph 3.

10. RIGHT FUEL DIVERTER VALVE SUPPORT.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29513-333
Packing	M25988/1-312
Petrolatum, Technical	VV-P-236 (CAGE 81349)

11. REMOVAL.

a. Remove right fuel diverter valve per paragraph 2.

b. If damage is limited to support (33, figure 2, sheet 2), do substeps below:

(1) Remove support (33) attaching parts.

(2) Remove bolts (14, sheet 1) and packing (1).

c. If damage is to support (34, figure 2, sheet 2), do substeps below:

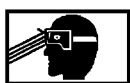
(1) Remove clamps (16, sheet 1) and attaching parts.

(2) Remove tube (15) attaching parts.

(3) Remove bolts (14) with washers and packings (1 and 6).

12. INSTALLATION.

a. If support (33, figure 2, sheet 2) was removed do substeps below:



Petrolatum

1

(1) Lubricate new packing (1, sheet 1) with petrolatum and install.

(2) Install bolts and washers attaching support (33).

(3) Install bolts (14) and attaching parts.

b. If support (34, figure 2, sheet 2) was removed, do substeps below:

(1) Lubricate and install new packings (1 and 6, sheet 1).

(2) Install supports (33 and 34, sheet 2) with bolts (14) and attaching parts.

(3) Install tube (15) attaching parts.

(4) Install clamps (16) with attaching parts.

c. Install fuel diverter valve per paragraph 3.

13. INSPECTION, SUPPORT ASSEMBLIES.

Support Equipment Required

None

Materials Required

None

a. Inspect brackets (19, 22, 25, 33, 34, or 37) for conditions listed below:

(1) Cracks.

(2) Corrosion.

(3) Sharp edges that could damage tank.

(4) Loose Rivets.

(5) Stripped bolts.

(6) Damaged or loose platenuts.

(7) Damaged or loose inserts.

14. REPAIR, SUPPORT ASSEMBLIES.

Support Equipment Required

None

Materials Required

None

15. DISASSEMBLY.

a. If damaged, remove platenut (23, 24, 27, 32, 35, 36, or 38, figure 2, sheet 2) per NAVAIR 01-1A-8.

16. ASSEMBLY.

a. Install platenut (23, 24, 27, 32, 35, 36, or 38, figure 2, sheet 2) per NAVAIR 01-1A-8.

17. ILLUSTRATED PARTS BREAKDOWN.

18. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

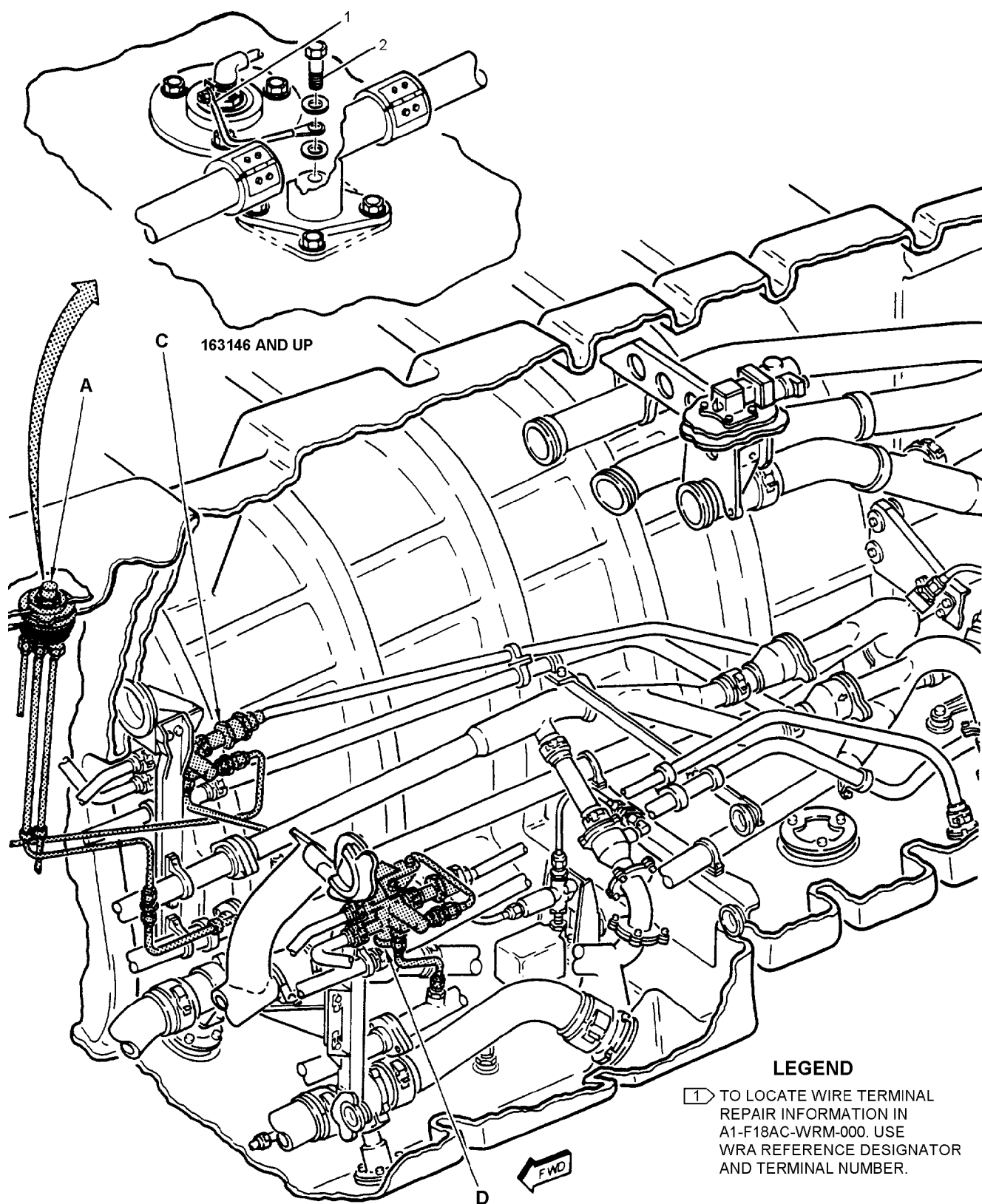
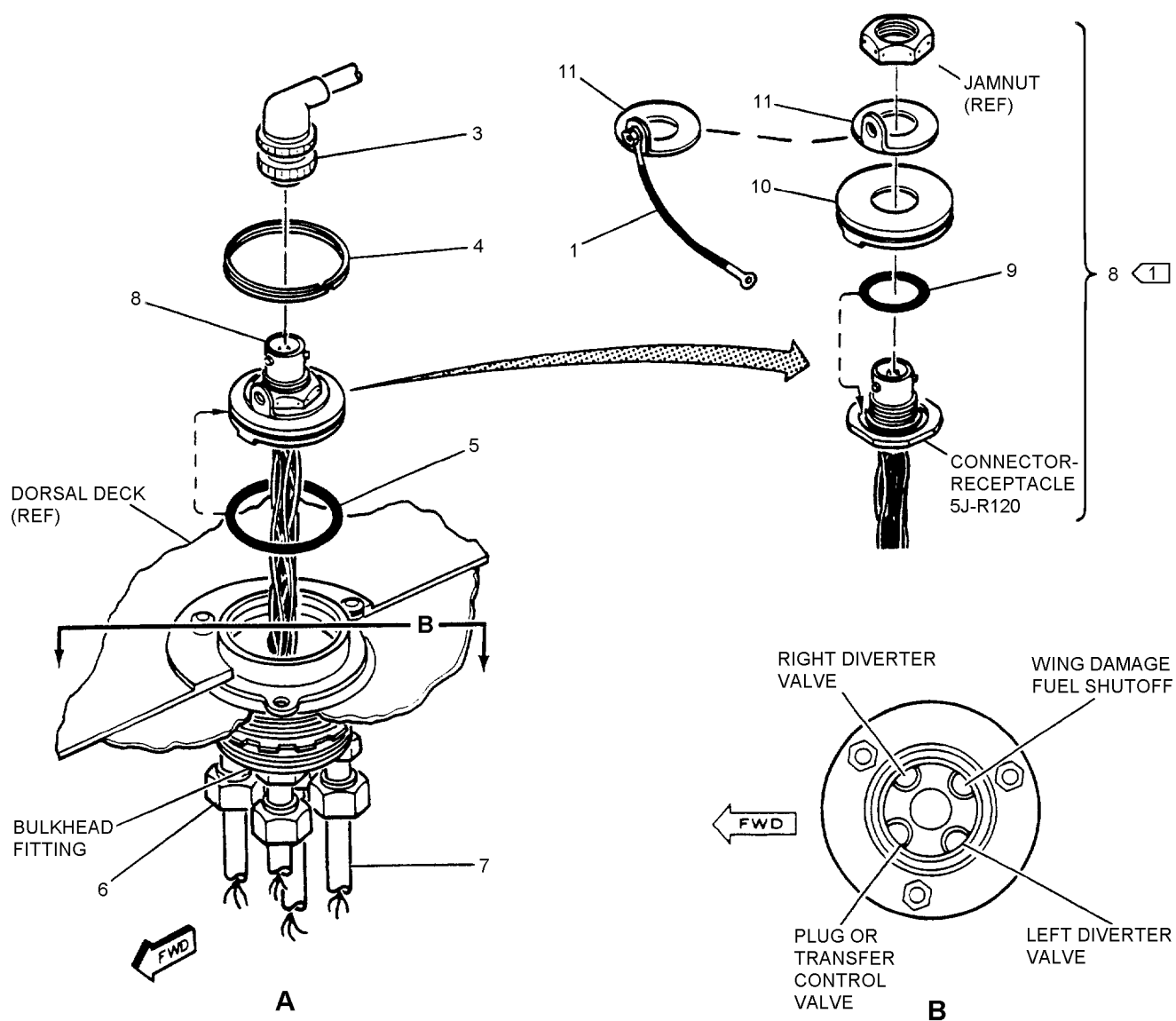


Figure 1. Fuel Diverter Valve (5L-P119 or 5L-R118) (Sheet 1)



5L-P119 LEFT FUEL DIVERTER VALVE	WHT OR GRN CC	Q249A22N	5
	BLK OR GRN-BB	Q248A22	6
	RED OR GRN+AA	Q247F22	7
5L-R118 RIGHT FUEL DIVERTER VALVE	WHT OR GRN CC	Q251A22N	8
	BLK OR GRN-BB	Q250A22	9
	RED OR GRN+AA	Q247H22	10

Figure 1. Fuel Diverter Valve (5L-P119 or 5L-R118) (Sheet 2)

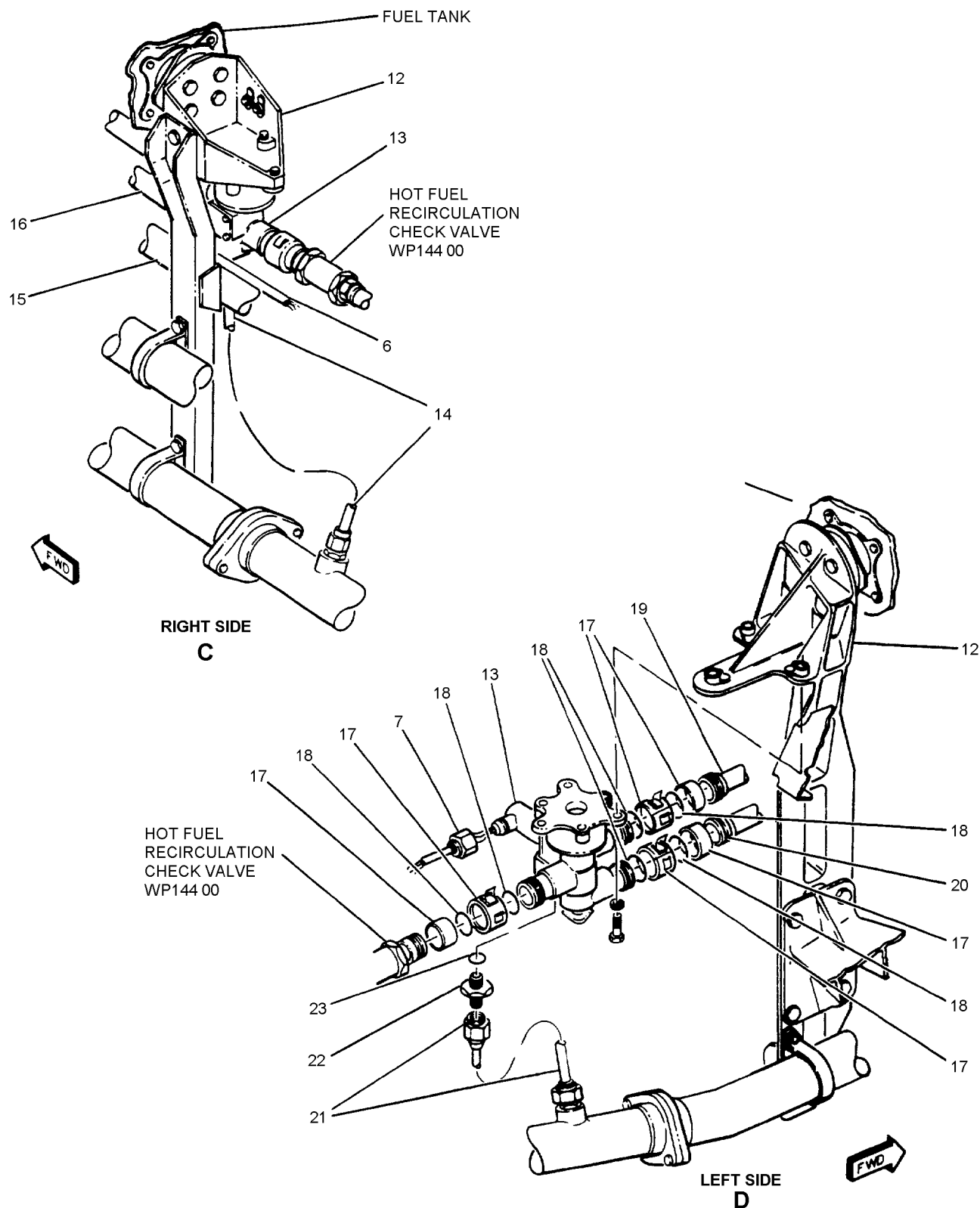


Figure 1. Fuel Diverter Valve (5L-P119 or 5L-R118) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		FUEL DIVERTER VALVE (5L-P119 OR SL-R118)			
1	MS25083-2BC5	. LEAD ELECTRICAL	1	C	PAOZZ
	NAS673V2	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
	NAS1291C3M	. NUT (AP)	1		PAOZZ
2	NAS674V5	. BOLT	1	C	PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 2)	1		PAOZZ
	AN960JD416	. WASHER (USE WITH INDEX 2)	1		PAOZZ
3	MS27467T11B35S	. CONNECTOR. PLUG (5P-R120)	1		PAOZZ
4	RRT 200 SP M9	. RING, RETAINING (80756) (MCDONNELL	1		PAOZZ
		SPEC 9M188C200)			
5	MS29513-132	. PACKING	1		PAOZZ
6	74A586869-1007	. TUBE ASSEMBLY, METAL - ELECT CONDUIT, ...	1	A	MGOZZ
		SOLENOID VALVE RH (76301)			
		(SUPERSEDES 74A586869-1001)			
7	74A586868-1001	. TUBE ASSEMBLY, METAL - ELECT	1	A	MGOZZ
		CONDUIT, SOLENOID VALVE LH (76301)			
	74A586868-1009	. SEE ABOVE (SUPERSEDES 74A586868-1003)	1	B	MGOZZ
8	KJL7YC103451-3	. CONNECTOR, RECEPTACLE, ELECTRICAL	1	*	PAOZZ
		(71468) (MCDONNELL SPEC			
		5M1701-11D35PN) (INCLUDES			
		MS27514-11E NUT) (5J-R120)			
	92344-01	. SEE ABOVE (14283)	1	*	PAOZZ
9	M25988/1-022	. PACKING (M25988-1-022)	1		PAOZZ
		(NHPA 5M1701-11D35PN)			
10	74A586454-2003	. HOLDER, ELECTRICAL CONNECTOR FUEL	1		PAOZZ
		SYSTEM (76301)			
11	74A586429-2355	. WASHER (76301) (SUPERSEDES	1		XBOZZ
		74A586429-2123)			
12	74A586442-1001	. SUPPORT ASSY - VALVE, SHUTTLE FUEL	1		XBOGG
		TANK NO. 4 (76301) (RIGHT SIDE)			
		(FOR REPAIR SEE FIGURE 2)			
	74A586442-1001	. SUPPORT ASSY - VALVE, SHUTTLE FUEL	1	A	XBOGG
		TANK NO. 4 (76301) (LEFT SIDE)			
		(FOR REPAIR SEE FIGURE 2)			
	74A586884-1001	. SUPPORT ASSY - TRANSFER MANIFOLD,	1	B	XBOOO
		TANK NO. 4 (76301) (LEFT SIDE)			
		(FOR REPAIR SEE FIGURE 2)			
	NAS674V1	. BOLT (AP)	6		PAOZZ
	AN960JD416L	. WASHER (AP)	4		PAOZZ
	MS29513-333	. PACKING (USE WITH INDEX 12)	1		PAOZZ
13	31900-107	. VALVE, SOLENOID DIRECTIONAL	1		PAOZZ
		CONTROL - FUEL (FUEL DIVERTER			
		VALVE) (04192) (MCDONNELL SPEC			
		74-580166-107) (5L-P119 OR 5L-R118)			
	31900-105	. VALVE, SOLENOID DIRECTIONAL	1	*	PAOZZ
		CONTROL - FUEL (FUEL DIVERTER			
		VALVE) (04192) (MCDONNELL SPEC			
		74-580166-105) (5L-P119 OR 5L-R118)			
	NAS674V2	. BOLT (AP)	3		PAOZZ
	AN960JD416L	. WASHER (AP)	3		PAOZZ

Figure 1. Fuel Diverter Valve (5L-P119 or 5L-R118) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
14	74A586850-1011	.	TUBE ASSEMBLY, METAL - ELEC	.....					1		MGOZZ
			CONDUIT, LOWER, RH (76301)								
			(SUPERSEDES 74A586850-1003)								
15	74A586861-1005	.	TUBE ASSEMBLY, METAL - HOT FUEL,	.....					1		XBOZZ
			WING RH (76301) (SUPERSEDES								
			74A586861-1001 OR 74A586861-1003)								
16	74A586863-1013	.	TUBE ASSEMBLY, METAL - HOT FUEL	.....					1		XBOZZ
			TO SCAV LINE, RH (76301)								
			(SUPERSEDES 74A586863-1001,								
			74A586863-1003, 74A586863-1005 OR								
			74A586863-1007)								
17	W901K12DE	.	COUPLING, CLAMP, GROOVED (79326)	.....					3		PAOZZ
			(MCDONNELL SPEC 7M765-12D)								
			(INCLUDES SLEEVE)								
	14J12-12A	.	COUPLING, CLAMP, GROOVED (24984)	.....					3		PAOZZ
			(MCDONNELL SPEC 7M765-12D)								
			(INCLUDES SLEEVE)								
	W901F12DE	.	COUPLING, CLAMP, GROOVED (79326)	.....					3	*	PAOZZ
			(MCDONNELL SPEC 7M550-12D)								
			(INCLUDES SLEEVE)								
18	MS29513-117	.	PACKING	.....					6		PAOZZ
19	74A586497-1007	.	TUBE ASSEMBLY, METAL - HOT FUEL	.....					1		XBOZZ
			TO SCAV LINE, LH (76301) (SUPERSEDES								
			74A58C497-1001 OR 74A586497-1005)								
20	74A586862-1011	.	TUBE ASSEMBLY, METAL - HOT FUEL,	.....					1		XBOZZ
			WING LH (76301) (SUPERSEDES								
			74A586862-1001, 74A586862-1003 OR								
			74A586862-1005)								
21	74A586871-1011	.	TUBE ASSEMBLY, METAL - ELEC COND	.....					1		MGOZZ
			VALVE, LOWER, LH (76301) (SUPERSEDES								
			74A586871-1003)								
22	7M637BD-6D	.	NIPPLE (76301)	.....					1		PAOZZ
23	MS29512-06	.	PACKING	.....					1		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161353 THRU 162414	F/A-18A/B
B	162415 & UP	F/A-18A/B
C	163146 & UP	F/A-18A/B

Figure 1. Fuel Diverter Valve (5L-P119 or 5L-R118) (Sheet 5)

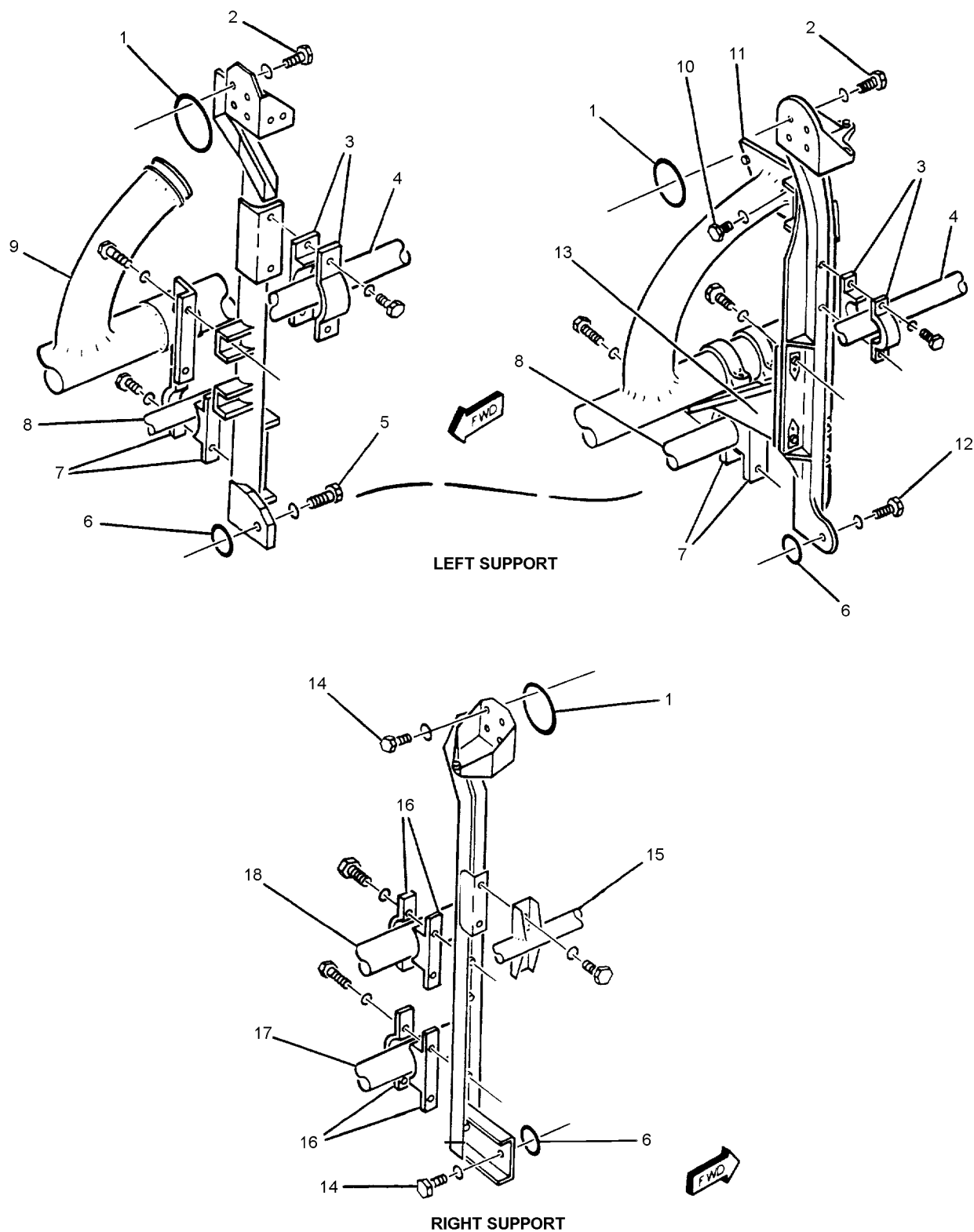


Figure 2. Fuel Diverter Valve Supports (Sheet 1)

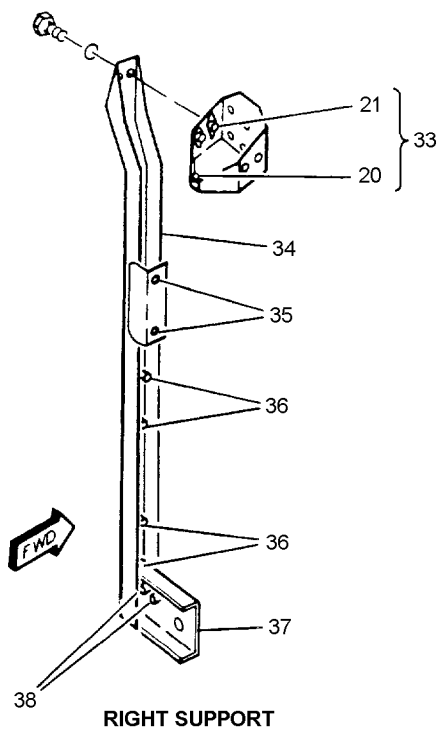
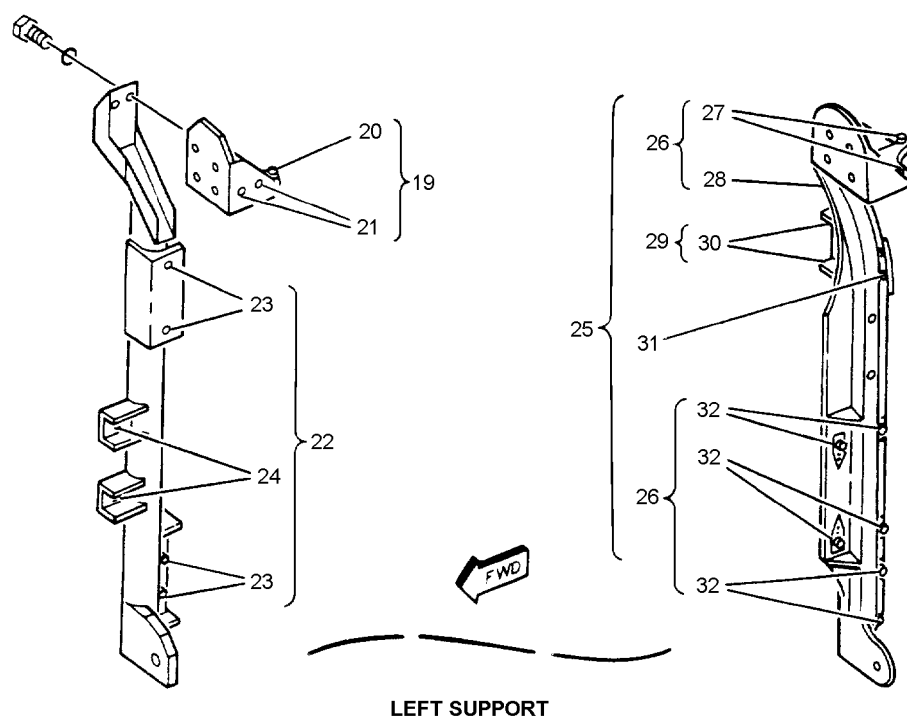


Figure 2. Fuel Diverter Valve Supports (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		FUEL DIVERTER VALVE SUPPORTS			
1	MS29513-333	. PACKING	1		PAOZZ
2	NAS674V1	. BOLT	4		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 2)	4		PAOZZ
3	ST9M620A16G	. CLAMP, LOOP (03296) (MCDONNELL SPEC	1		PAOZZ
		ST9M620A16G)			
	NAS673V8	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
4	74A586494-1009	. TUBE ASSEMBLY - METAL - VENT TANK	1		XBOZZ
		SCAVENGE, FUEL SYSTEM			
5	NAS674V3	. BOLT	1	A	PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 5)	1		PAOZZ
6	M2598811-312	. PACKING	1		PAOZZ
7	NAS1787A24G	. CLAMP	1		PAOZZ
	NAS673V8	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
8	74A586489-1001	. TUBE ASSEMBLY, METAL - MOTIVE	1		XBOOO
		FLOW BOOST, MAIN FUEL LH (76301)			
9	74A586482-1005	. MANIFOLD FLUID AIRCRAFT FUEL	1	A	XBOZZ
		TRANSFER TANK NO. 4 (76301)			
		(REPLACED BY 74A586482-1007,			
		74A586482-1009 AND 74A586482-1011			
		AS AN ASSEMBLY) (REF WP028 00)			
	74A586482-1007	. SEE ABOVE (REPLACES 74A586482-1005)	1	A	PAOZZ
		(REPLACED BY 74A586482-1017)			
		(REF WP028 00)			
	NAS673V2	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
10	NAS674V5	. BOLT	2	B	PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 10)	2		PAOZZ
11	74A586482-1017	. MANIFOLD FLUID AIRCRAFT FUEL	1	B	PAOZZ
		TRANSFER TANK NO. 4 (76301)			
		(REPLACES 74A586482-1007)			
		(REF WP028 00)			
12	NAS674V3	. BOLT	1	B	PAOZZ
	AN960J1D416L	. WASHER (USE WITH INDEX 12)	1		PAOZZ
13	74A586878-1005	. SUPPORT ASSY (76301)	1	B	XBOGG
	MS21209F1-15L	. INSERT (USE WITH INDEX 13)	4		PAOZZ
	NAS673V4	. BOLT (AP)	4		PAOZZ
	AN960JD10L	. WASHER (AP)	4		PAOZZ
14	NAS674V1	. BOLT	5		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 14)	5		PAOZZ
15	74A586495-1003	. MANIFOLD FLUID, AIRCRAFT VENT	1		XBOZZ
		TK SCAV RH, FWD TK NO. 4 (76301)			
	NAS673V1	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
16	NAS1787A24G	. CLAMP	2		PAOZZ
	NAS673V9	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
17	74A586491-1001	. TUBE ASSEMBLY, METAL - MOTIVE FLOW	1		XBOOO
		BOOST, MAIN FUEL RH (76301)			
18	74A586493-1003	. TUBE ASSEMBLY, METAL - MOTIVE FLOW	1		XBOOO
		BOOST, FUEL TRANSFER (76301)			

Figure 2. Fuel Diverter Valve Supports (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USE ON CODE	SM&R CODE
		1 2 3 4 5 6 7			
19	74A586442-1001	. SUPPORT ASSY, VALVE - SHUTTLE, FUEL	1	A	XBOGG
		TANK NO. 4 (76301) (LEFT SIDE)			
	NAS674V1	. BOLT (AP)	2		PAOZZ
	AN960JD416L	. WASHER (AP)	2		PAOZZ
20	MS21209F4-15	. INSERT	3	A	PAOZZ
21	NS20212-048	. NUT, PLATE (80539) (MCDONNELL SPEC	4	*	PAOZZ
		ST3M725C4M)			
	F12198-4	. SEE ABOVE (72962)	4	*	PAOZZ
	F50405-4	. SEE ABOVE (15653)	4	*	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
22	74A586878-1001	. SUPPORT ASSY - FUEL LINES TANK NO. 4	1	A	XBOGG
		(76301)			
23	MS21062L3	. NUT, PLATE	4		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
24	MS21060L3	. NUT, PLATE	2	A	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
25	74A586884-1001	. SUPPORT ASSY FUEL LINES TANK NO. 4	1	B	XBOOO
		(76301) (LEFT SIDE)			
26	74A586878-1007	. SUPPORT (76301)	1	B	XBOOO
27	MS21073L4	. NUT, PLATE	3	B	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
28	74A586878-2017	. BEAM (76301)	1		XBOZZ
29	74A586429-1093	. SUPPORT ASSY (76301)	1		XBOOO
30	74A586429-2217	. BRACKET (76301)	1		XBOZZ
	MS20426AD3 #	. RIVET (USE WITH INDEX 30)	4		-
31	HLT312-5-L3	. PIN-RIVET, THREADED (97928)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M761V08L3)			
	AIC-L-761V08L3	. SEE ABOVE (06725)	2	*	PAOZZ
	SW1000-5M	. COLLAR, RIVET PIN (73197)	2		PAOZZ
		(USE WITH INDEX 31)			
		(MCDONNELL SPEC ST3M526C08M)			
32	MS21062L3	. NUT, PLATE	8	B	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
33	74A586442-1001	. SUPPORT ASSY, VALVE - SHUTTLE FUEL	1		XBOGG
		TANK NO. 4 (76301) (RIGHT SIDE)			
	NAS674V1	. BOLT (AP)	2		PAOZZ
	AN960JD416L	. WASHER (AP)	2		PAOZZ
34	74A586878-1003	. BRACKET ASSY (76301)	1		MGOZZ
35	MS21062L3	. NUT, PLATE	2		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
36	MS21060L3	. NUT, PLATE	4		PAOZZ
	MS20426AD3	. RIVET (AP)	2		-
37	74A586483-1001	. BRACKET - ATTACH, SUPPORT, FUEL	1		XBOGG
		LINE CLAMPS, LOWER, RH (76301)			
38	MS21060L3	. NUT, PLATE	2		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-

LENGTH/SIZE TO BE DETERMINED AT INSTALLATION.

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

Figure 2. Fuel Diverter Valve Supports (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

CODE	USABLE ON	MODEL
A	161742 THRU 161982 BEFORE F/A-18 IAFC 017 PART 1 AND 161353 THRU 161741 BEFORE F/A-18 IAFC 017 PART 2	F/A-18A/B
B	161983 & UP: ALSO 161742 THRU 161982 AFTER F/A-18 IAFC 017 PART 1, AND 161353 THRU 161741 AFTER F/A-18 IAFC 017	F/A-18A/B

Figure 2. Fuel Diverter Valve Supports (Sheet 5)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
GROUND AIR PRESSURIZATION CONNECTOR OR FILTER (5PAP636 OR 5FAP638)
FUEL PRESSURIZATION AND VENT SYSTEM

Reference Material

None

Alphabetical Index

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Installation - Filter	2
Removal - Connector	1
Removal - Filter	1

Record of Applicable Technical Directives

None

Support Equipment Required

Nomenclature	Part Number or Type Designation	CAGE Code
External Air Source	-	-

1. REMOVAL - CONNECTOR.

a. Disconnect coupling half (3, figure 1, detail A) from tube (4).

2. REMOVAL - FILTER.

a. Remove clamp (2, figure 1, detail A) and attaching parts.

b. Disconnect tube (4) and remove filter (5).

3. INSTALLATION - CONNECTOR.

a. Install coupling half (3, figure 1, detail A) on tube (4).

Materials Required

None

4. **INSTALLATION - FILTER.**

- a. Install filter (5, figure 1, detail A) in tube (4).
- b. Install tube (4).
- c. Install clamp (2) and attaching parts.

- d. Connect air supply and inspect for leaks.

5. **ILLUSTRATED PARTS BREAKDOWN.**

6. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

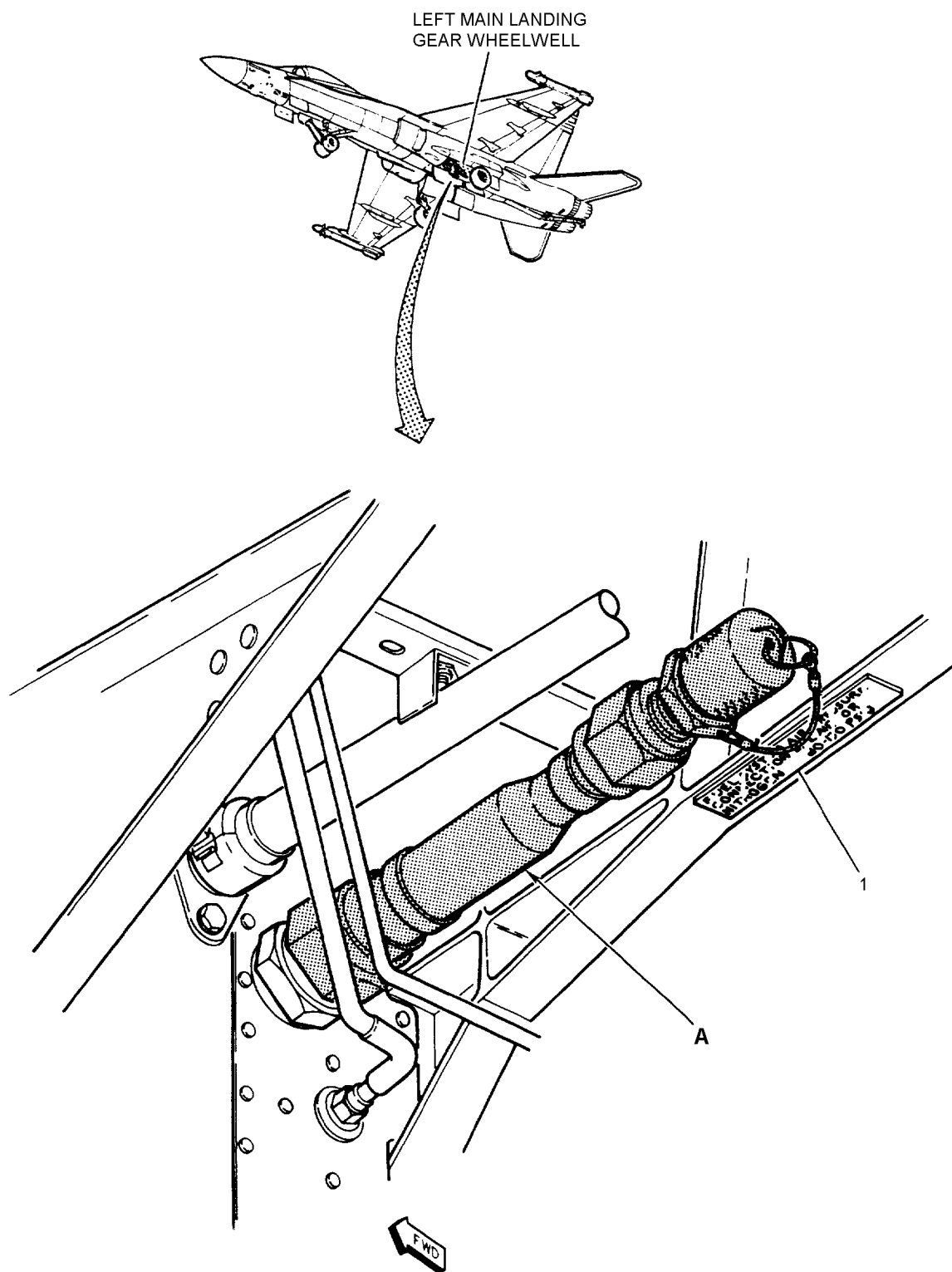


Figure 1. Ground Air Pressurization Connector (5PAP636 or Filter 5FAP638) (Sheet 1)

1470001A

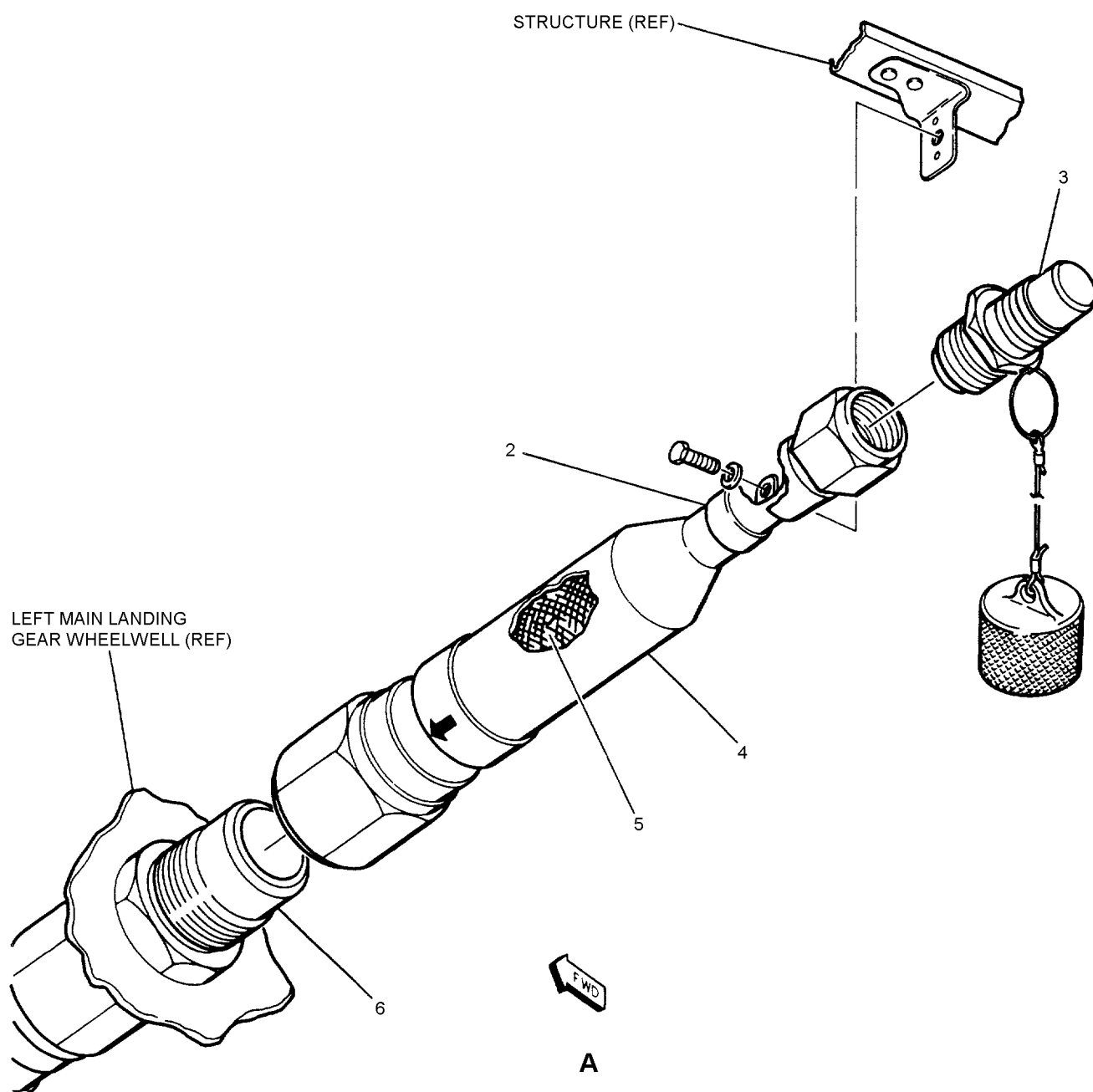


Figure 1. Ground Air Pressurization Connector (5PAP636 or Filter 5FAP638) (Sheet 2)

1470001B

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		GROUND AIR PRESSURIZATION CONNECTOR									
		(5PAP6363) OR FILTER (5FAP638)									
1	74A586555-2013	.						PLATE, INSTRUCTION (76301)	1		MDOZZ
2	MS21919WDG8	.						CLAMP	1		PAOZZ
	NAS673V2	.						BOLT (AP)	1		PAOZZ
	AN960JD10L	.						WASHER (AP)	1		PAOZZ
3	205N80HD8	.						COUPLING HALF, QUICK DISCONNECT-AIR	1		PAOZZ
								PRESS, GND, ENG FUEL (GROUND AIR PRESSURIZATION CONNECTOR) (76326) (MCDONNELL SPEC 74B588002-101) (5PAP636) (INCLUDES CAP)			
4	74A586724-1003	.						TUBE ASSEMBLY, METAL - FUEL	1		PBOZZ
								PRESSURIZATION SYS, EXT AIR (76301) (REPLACES 74A586724-1001)			
	74A586724-1001	.						SEE ABOVE (USE UNTIL EXHAUSTED)	1	*	PAOZZ
5	10-686	.						FILTER ELEMENT, FLUID PRESSURE AIR	1		PAOZZ
								FUEL SYS (GROUND AIR PRESSURIZATION FILTER) (14818) MCDONNELL SPEC 74J588003-101) (5FAP638)			
6	7M133V08-16	.						REDUCER (76301)	1		PAOZZ
	7M133D08-16	.						REDUCER (76301)	1	*	PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00).

Figure 1. Ground Air Pressurization Connector (5PAP636 or Filter 5FAP638) (Sheet 3)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

INTERNAL FUEL TANKS AIR PRESSURE REGULATORS (5L-T104)

FUEL PRESSURIZATION AND VENT SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-200
Pressurization and Vent System	WP021 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000

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Removal	1

Record of Applicable Technical Directives

None

Support Equipment Required

Packing	MS29512-24
Packing (2)	M25988/1-218
Packing (2)	M25988/1-222
Petrolatum, Technical	VV-P-236 (CAGE 81348)

None

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC32 (CAGE 96906)
Packing	MS28778-6
Packing	MS29512-04

1. REMOVAL.

a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).

b. Remove door 63R (A1-F18AC-LMM-010).



Jet Fuel



7

- c. If fuel is suspected to be in vent tanks, drain vent tanks (A1-F18AC-PCM-000).
- d. Disconnect connectors (3 and 25, figure 1).
- e. Disconnect tubes (5 and 7).
- f. Remove coupling (2) per WP013 00 and remove packings (1).
- g. Remove coupling (12) per WP013 00.
- h. Remove bolts (17), washers (16), and regulator (15).
- i. Remove packings (11).
- j. Remove valve (13) from regulator (15).
- k. Remove packing (14).
- l. Cover all openings to prevent contamination.
- m. Remove lockwire from pressure switch (24).
- n. Remove tee (23), pressure switch (24), packing (20) and retainer.
- o. Remove reducer (18), packing (19), and nipple (27) with vent cap (26) attached.

2. INSTALLATION.

- a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).



Petrolatum



1

- b. Lubricate new packings with petrolatum.
- c. On regulator (15, figure 1), install packing (19), reducer (18), and nipple (27) with vent cap (26) attached.
- d. Install nut (22), retainer (21), and packing (20) on tee (23), install tee (23) and pressure switch (24) on regulator (15), position tee and tighten nut (22).
- e. Safety pressure switch (24) with lockwire. (QA)
- f. Install packing (14).
- g. Install valve (13), with arrow on valve pointing outboard, on regulator (15).
- h. Install packings (11).
- i. Prepare mating surfaces of regulator (15) and structure for electrical bond (A1-F18AC-LMM-000).
- j. Install regulator (15) then install bolts (17) and washers (16) loosely.
- k. Inspect and install coupling (12) per WP013 00.
- l. Connect tubes (5 and 7).
- m. Tighten bolts (17).
- n. Connect connectors (3 and 25).
- o. Install packings (1) and inspect and install coupling (2) per WP013 00.
- p. Do internal pressurization system test (A1-F18AC-460-200, WP021 00) and inspect regulator (15) connections for leakage.
- q. Install door 63R (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

- 4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

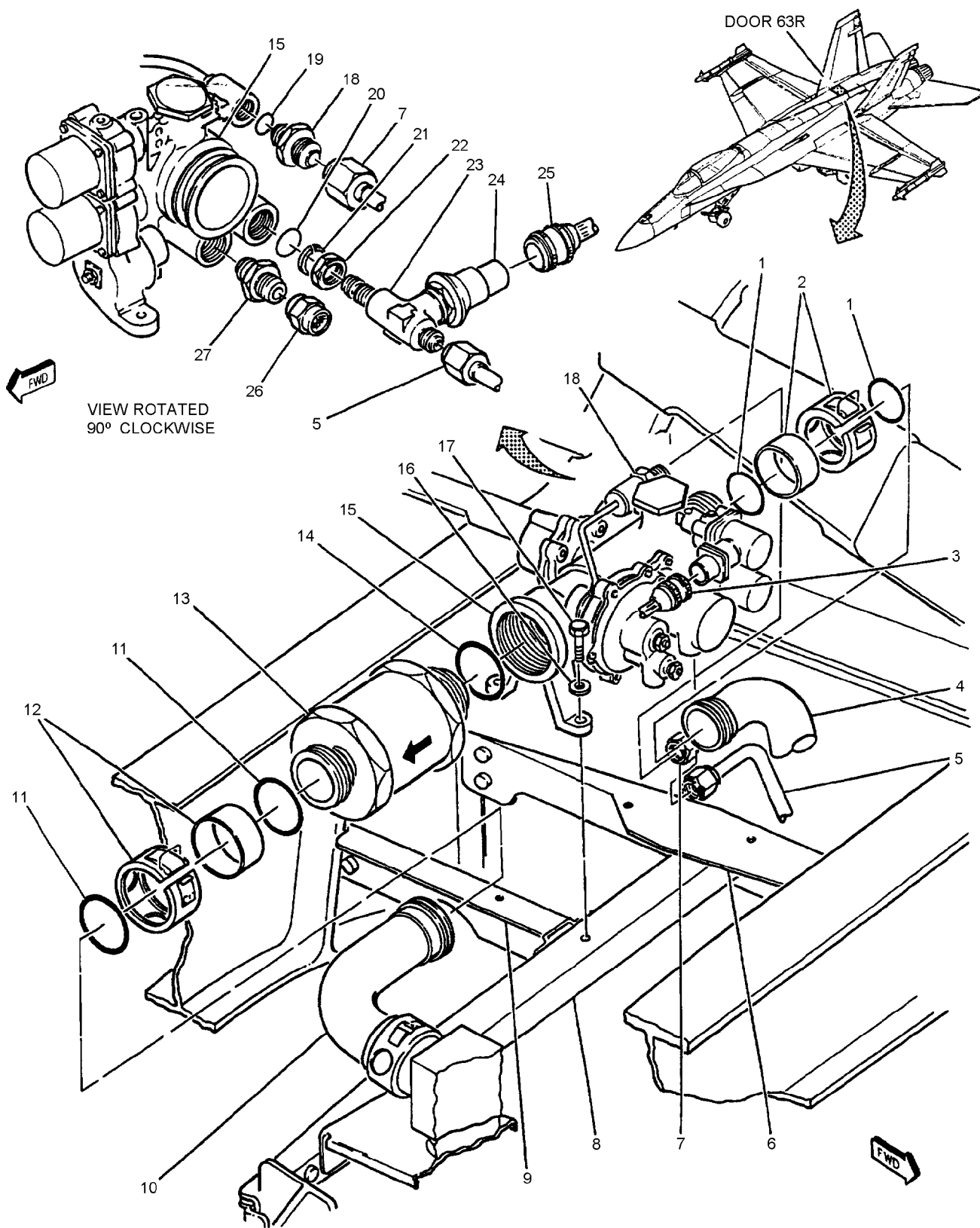


Figure 1. Internal Fuel Tanks Air Pressure Regulator (5L-T104) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USE ON CODE	SM&R CODE
		1 2 3 4 5 6 7			
		INTERNAL FUEL TANKS AIR PRESSURE REGULATOR (5L-T104)			
1	M83248/1-218	. PACKING	2		PAOZZ
2	W901K20DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-20D) (INCLUDES SLEEVE)	1		PAOZZ
	14J12-20A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-20D) (INCLUDES SLEEVE)	1		PAOZZ
	W901C20DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-20D) (INCLUDES SLEEVE)	1	*	PAOZZ
3	MS27467T9B35S	. CONNECTOR, PLUG (5P-T104)	1		PAOZZ
4	74A586501-1001	. TUBE ASSEMBLY, METAL - FUEL PRESS SYS, Y557.5 PRESS REG (76301)	1		PAOZZ
	74A586708-1001	. TUBE ASSY, METAL - FUEL PRESS SYS, Y557.5 PRESS REG (76301)	1	*	PAOZZ
5	74A586524-1003	. TUBE ASSEMBLY, METAL - PRESSURE SNSR, VENT TANK (76301) (SUPERSEDES 74A586524-1001)	1		MGOZZ
6	74A586728-1025	. SUPPORT, FUEL LINE, PRESSURIZATION SYSTEM (76301)	1		XBOOO
	NAS673V2	. BOLT (AP)	4		PAOZZ
	AN960JD10L	. WASHER (AP)	4		PAOZZ
7	74A586527-1003	. TUBE ASSEMBLY, METAL - OVERBOARD RGLTR VENT, UPPER (76301) (SUPERSEDES 74A586527-1001)	1		MGOZZ
8	74A586728-1027	. SUPPORT, FUEL LINE, PRESSURIZATION SYSTEM (76301)	1	B	XBOOO
	74A586728-1051	. SUPPORT, FUEL LINE, PRESSURIZATION SYSTEM (76301)	1	C	XBOOO
	NAS673V2	. BOLT (AP)	4		PAOZZ
	AN960JD10L	. WASHER (AP)	4		PAOZZ
	MS20470AD5 #	. RIVET (AP)	2		-
	MS21060L3	. NUT, PLATE (USE WITH INDEX 8)	4	B	PAOZZ
	MS21060L3	. NUT, PLATE (USE WITH INDEX 8)	5	C	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
	MS21062L3	. NUT, PLATE (USE WITH INDEX 8)	1		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
	MS21060L4	. NUT, PLATE (USE WITH INDEX 8) (MATES WITH AIR PRESSURE REGULATOR)	3		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
9	74A586731-1053	. BRACKET ASSY, FUEL PRESSURE LINE PRESSURIZATION SYSTEM (76301)	1		XBOOO
	74A586731-2149	. BRACKET (76301) (USE WITH INDEX 9) (SUPERSEDES 74A586731-2107)	1		XBOZZ
	NAS673V2	. BOLT (AP)	4		PAOZZ
	AN960JD10L	. WASHER (AP)	4		PAOZZ
	MS21060L4	. NUT, PLATE (USE WITH INDEX 9) (MATES WITH AIR PRESSURE REGULATOR)	1		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
	MS21060L3	. NUT, PLATE (TOP FLANGE) (USE WITH INDEX 9)	2		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
	74A885604-2005	. SPACER (UNDER NUT PLATES ON TOP FLANGE) (USE WITH INDEX 9)	2		PAOZZ
	MS21060L3	. NUT, PLATE (SIDE FLANGE) (USE WITH INDEX 9)	2		PAOZZ

Figure 1. Internal Fuel Tanks Air Pressure Regulator (5L-T104) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
	MS20426AD3 #	. RIVET (AP)	2		-
10	74A586529-1003	. TUBE ASSEMBLY, METAL - AIR PRESS SYSTEM, VENT TANK (76301)	1		PAOZZ
	74A586529-1001	. TUBE ASSEMBLY, METAL - AIR PRESS SYSTEM, VENT TANK (76301)	1	*	PAOZZ
11	M83248/1-222	. PACKING	2		PAOZZ
12	W901K24DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-24D) (INCLUDES SLEEVE)	1		PAOZZ
	14J12-24A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-24D) (INCLUDES SLEEVE)	1		PAOZZ
	W901F24DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-24D) (INCLUDES SLEEVE)	1	*	PAOZZ
13	CV99-158-24	. VALVE, CHECK, ENGINE BLEED AIR (INTERNAL AIR PRESSURIZATION CHECK VALVE) (91816) (MCDONNELL SPEC 74B580185-117) (5VAT513)	1		PAOZZ
	P112-533-24	. SEE ABOVE (MCDONNELL SPEC 74B580185-105)	1	*	PAOZZ
14	MS29512-24	. PACKING	1		PAOZZ
15	722740D	. REGULATOR, AIR PRESSURE, AIRCRAFT FUEL TANK - INTERNAL (INTERNAL FUEL TANKS AIR PRESSURE REGULATOR) (99167) (MCDONNELL SPEC 74-580138-101) (5L-T104)	1		PAODD
	722740C	. SEE ABOVE	1	*	PAODD
	722740B	. SEE ABOVE	1	*	PAODD
16	AN960JD416L	. WASHER (AP)	4		PAOZZ
17	NAS674V5	. BOLT (AP)	4		PAOZZ
18	7M637DA-6D	. REDUCER, TUBE (76301)	1		PAOZZ
19	MS29512-04	. PACKING	1		PAOZZ
20	MS28778-6	. PACKING	1		PAOZZ
21	MS28773-06	. RETAINER	1		PAOZZ
22	AN6289D6	. NUT	1		PAOZZ
23	7M637AK-D6	. TEE, TUBE TO BOSS (76301)	1		PAOZZ
24	12446-113	. SWITCH, PRESSURE - FUEL (AIR PRESSURE SWITCH) (98505) (MCDONNELL SPEC 74-580167-113) (5S-T106) (REPLACES 12446-103)	1		PAOZZ
	12446-103	. SWITCH, PRESSURE - FUEL (AIR PRESSURE SWITCH) (98505) (MCDONNELL SPEC 74-580167-103) (5S-T106) (USE UNTIL EXHAUSTED)	1	A	PAOZZ
	MS29512-06	. PACKING (USE WITH INDEX 24)	1		PAOZZ
25	MS27467T11B98S	. CONNECTOR, PLUG (5P-T106)	1		PAOZZ
26	7M35-5	. CAP (76301) (VENT)	1		XBOZZ
27	7M637BD-5D	. NIPPLE (76301)	1		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

Figure 1. Internal Fuel Tanks Air Pressure Regulator (5L-T104) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

CODE	USABLE ON	MODEL
A	161353 THRU 161521	F/A-18A/B
B	161353 THRU 161519	F/A-18A/B
C	161520 & UP	F/A-18A/B

Figure 1. Internal Fuel Tanks Air Pressure Regulator (5L-T104) (Sheet 4)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
AIR PRESSURE SWITCH (5S-T106)
FUEL PRESSURIZATION AND VENT SYSTEM

Reference Material

Fuel System	A1-F18AC-460-200
Fuel Pressurization and Vent System Test	WP021 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

None

1. REMOVAL.

- a. Make sure electrical power is off (A1-F18AC-LMM-000).
- b. Remove door 63R (A1-F18AC-LMM-010).
- c. Disconnect connector (4, figure 1).
- d. Remove lockwire from switch (3).
- e. Remove switch (3) from tee (1).

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC32 (CAGE 96906)
Packing	MS29512-06
Petrolatum, Technical	VV-P-236 (CAGE 81348)

2. INSTALLATION.

- a. Prepare mating surfaces of switch (3, figure 1) and tee (1) for electrical bonding (A1-F18AC-LMM-000).



Petrolatum

1

b. Lubricate packing (2) with petrolatum and install on switch (3).

c. Install switch (3) into tee (1).

d. Safety switch (3) with lockwire. (QA)

e. Connect connector (4).

f. Do fuel pressurization and vent system test (A1-F18AC-460-200, WP021 00).

g. Install door 63R (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

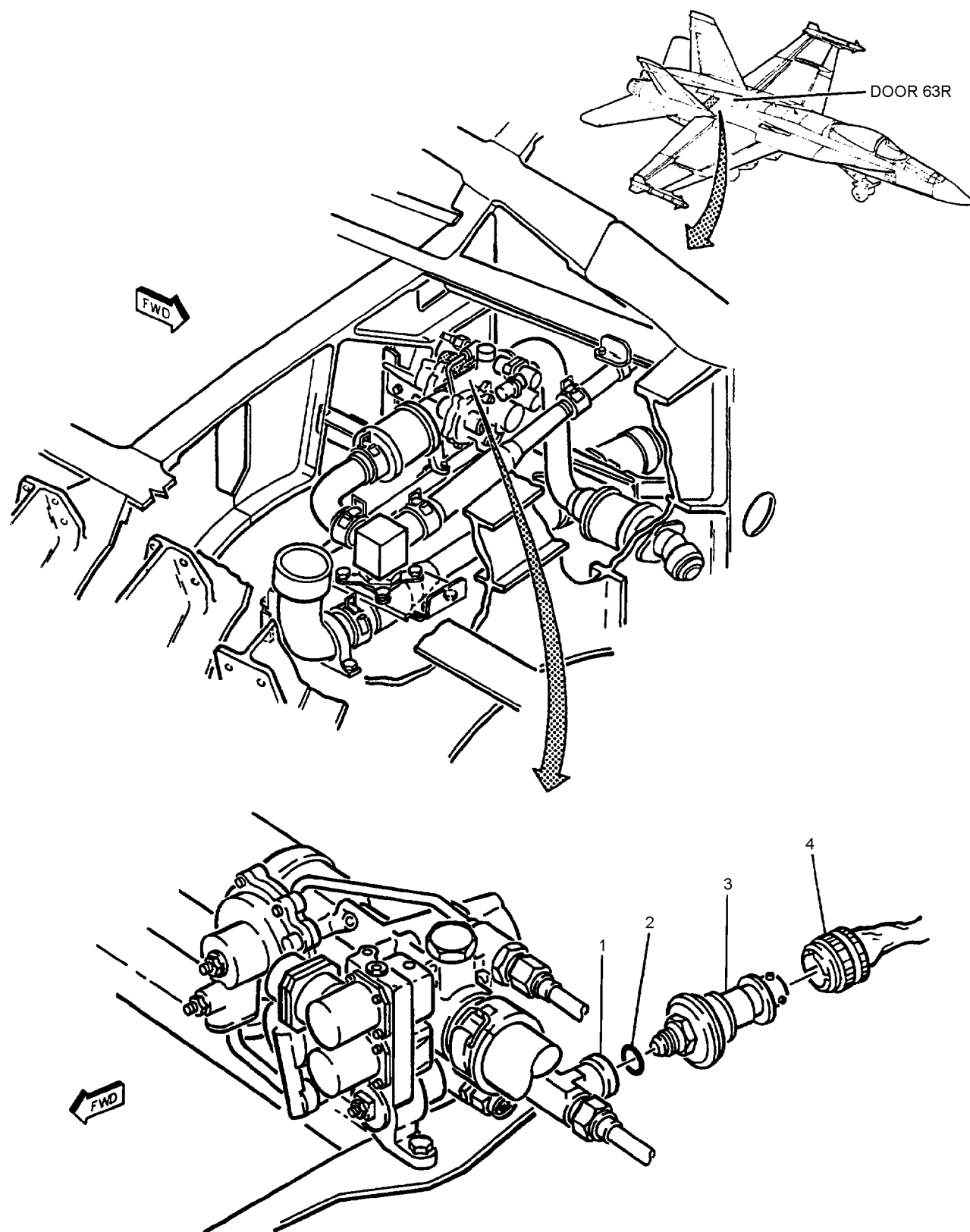


Figure 1. Air Pressure Switch (5S-T106) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		AIR PRESSURE SWITCH (5S-T106)			
1	7M637AK-D6	. TEE, TUBE TO BOSS (76301)	1		PAOZZ
	AN783D6	. TEE	1	*	PAOZZ
2	MS29512-06	. PACKING	1		PAOZZ
3	12446-113	. SWITCH, PRESSURE - FUEL (AIR PRESSURE	1	*	PAOZZ
		SWITCH) (98505) (MCDONNELL SPEC			
		74-580167-113) (5S-T106)			
		(REPLACES 12446-103)			
	2299-13	. SEE ABOVE (55723)	1	*	PAOZZ
	12446-103	. SWITCH, PRESSURE - FUEL (AIR PRESSURE	1	A	PAOZZ
		SWITCH) (98505) (MCDONNELL SPEC			
		74-580167-103) (5S-T106) (USE UNTIL			
		EXHAUSTED)			
4	MS27467T11B98S	. CONNECTOR, PLUG (5P-T106)	1		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161353 THRU 161521	F/A-18A/B

Figure 1. Air Pressure Switch (5S-T106) (Sheet 2)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
PRESSURIZATION SYSTEM AIR PUMP (5BAS511 OR 5BAT512)
FUEL PRESSURIZATION AND VENT SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Structural Hardware	NAVAIR 01-1A-8

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Inspection	3
Repair	3
Assembly	4
Disassembly	4
Support Assembly	3
Installation	3
Removal	3

Record of Applicable Technical Directives

None

1. AIR PUMP.**Support Equipment Required**

None

Materials Required

Nomenclature	Specification or Part Number
Lockwire	MS20995NC32 (CAGE 96906)
Packing	MS29512-12
Packing (2)	MS29513-226
Packing (2)	M29588/1-214
Packing (4)	M29588/1-222
Petrolatum, Technical	VV-P-236 (CAGE 81348)

2. REMOVAL - LEFT SIDE.

- a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).
- b. Remove door 63L (A1-F18AC-LMM-010).
- c. Remove coupling (8, figure 1, sheet 2) and packings (7).
- d. Remove lockwire and loosen nut (5) and remove elbow (6).
- e. Remove packing (3) and retainer (4).
- f. Remove bolts (17 and 18) and washers.
- g. Remove couplings (41, sheet 4), packings (42), and pump (43).

3. REMOVAL - RIGHT SIDE.

- a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).
- b. Remove door 63R (A1-F18AC-LMM-010).
- c. Remove couplings (36, figure 1, sheet 3) and packings (37).
- d. Remove lockwire and loosen nut (38) and remove manifold (33).

- e. Remove packing (40) and retainer (39).

- f. Remove bolts (32) and washers.

- g. Remove couplings (41, sheet 4), packings (42), and pump (43).

4. INSTALLATION - LEFT SIDE.**NOTE**

Make sure corrosion prevention of fasteners and attaching parts is done during installation (A1-F18AC-LMM-000).

- a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).



Petrolatum

1

- b. Lubricate new packings with petrolatum.
- c. Install pump (43, figure 1, sheet 4), packings (42), and inspect and install couplings (41) per WP013 00.
- d. Install bolts (17 and 18, sheet 2) and attaching parts.
- e. Install retainer (4) and packing (3) on elbow (6).
- f. Install elbow (6) and tighten nut (5). Safety nut with lockwire. (QA)
- g. Install packings (7) and inspect and install coupling (8) per WP013 00.
- h. Inspect installation for air leaks using substeps below:
 - (1) Operate APU in ECS mode (A1-F18AC-LMM-000).
 - (2) On ECS control box panel assembly pull BLEED AIR AUG PULL control switch.
 - (3) Inspect for air leaks.
 - (4) Push in BLEED AIR AUG PULL control switch.

(5) Shut down APU (A1-F18AC-LMM-000).

i. Install door 63L (A1-F18AC-LMM-010).

5. INSTALLATION - RIGHT SIDE.

NOTE

Make sure corrosion prevention of fasteners and attaching parts is done during installation (A1-F18AC-LMM-000).

a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).



Petrolatum

1

b. Lubricate new packings with petrolatum.

c. Install pump (43, figure 1, sheet 4), packings (42) and inspect and install couplings (41) per WP013 00.

d. Install bolts (32, sheet 3) and washers.

e. Install retainer (39) and packing (40) on manifold (33).

f. Install manifold (33) and tighten nut (38). Safety nut with lockwire. (QA)

g. Install packings (37) and inspect and install coupling (36) per WP013 00.

h. Inspect installation for air leaks using substeps below:

(1) Operate APU in ECS mode (A1-F18AC-LMM-000).

(2) On ECS control box panel assembly pull BLEED AIR AUG PULL control switch.

(3) Inspect for air leaks.

(4) Push in BLEED AIR AUG PULL control switch.

(5) Shut down APU (A1-F18AC-LMM-000).

i. Install door 63R (A1-F18AC-LMM-010).

6. SUPPORT ASSEMBLY.

Support Equipment Required

None

Materials Required

None

7. REMOVAL.

a. Remove support (9, figure 1, sheet 2), bolts (21 and 23) and washers.

b. If damaged, remove brackets (10) and attaching parts.

8. INSTALLATION.

a. If removed, install brackets (10, figure 1, sheet 2) and attaching parts.

b. Install support (9), bolts (21 and 23) and washers.

9. INSPECTION.

Support Equipment Required

None

Materials Required

None

a. Inspect support (9, figure 1, sheet 2) and brackets (10) per substeps below:

(1) Cracks.

(2) Corrosion.

(3) Sharp edges that could damage tank.

(4) Stripped plate nuts.

10. REPAIR.

Support Equipment Required

None

Materials Required

None

NOTE

Repair of support (9, figure 1, sheet 2) is limited to replacement of plate nuts (22).

11. DISASSEMBLY.

a. Remove support (9, figure 1, sheet 2) per paragraph 7.

b. If damaged, remove plate nuts (22) and rivets per NAVAIR 01-1A-8.

12. ASSEMBLY.

a. Install plate nuts (22, figure 1, sheet 2) and rivets per NAVAIR 01-1A-8.

b. Install support (9) per paragraph 8.

13. ILLUSTRATED PARTS BREAKDOWN.

14. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

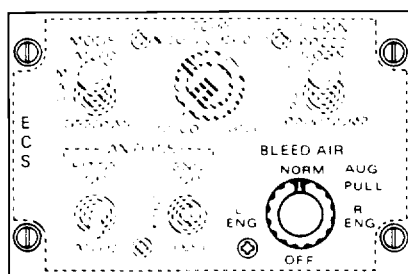
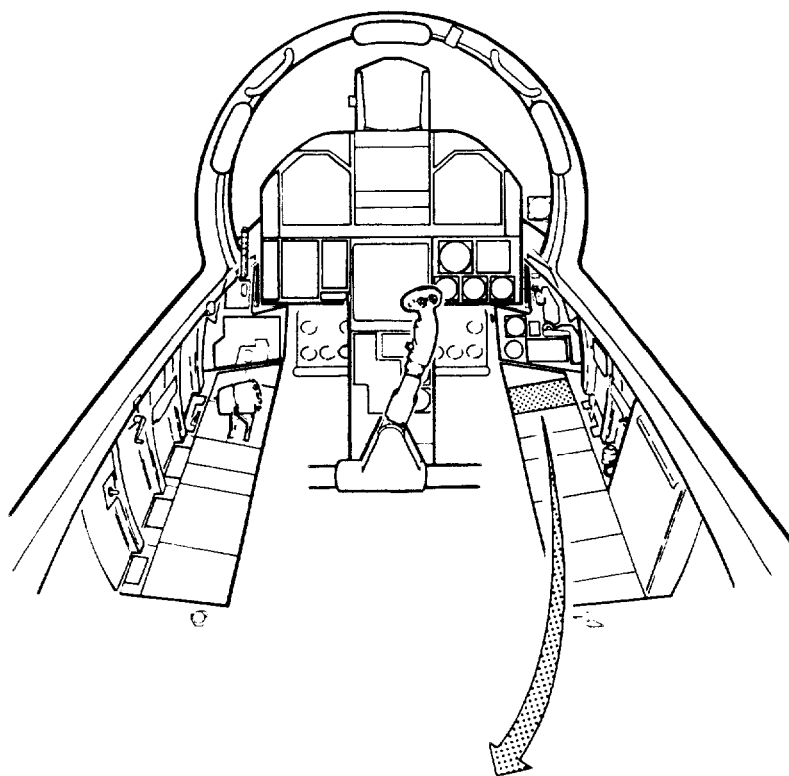


Figure 1. Pressurization System Air Pump (5BAS511 or 5BAT512) (Sheet 1)

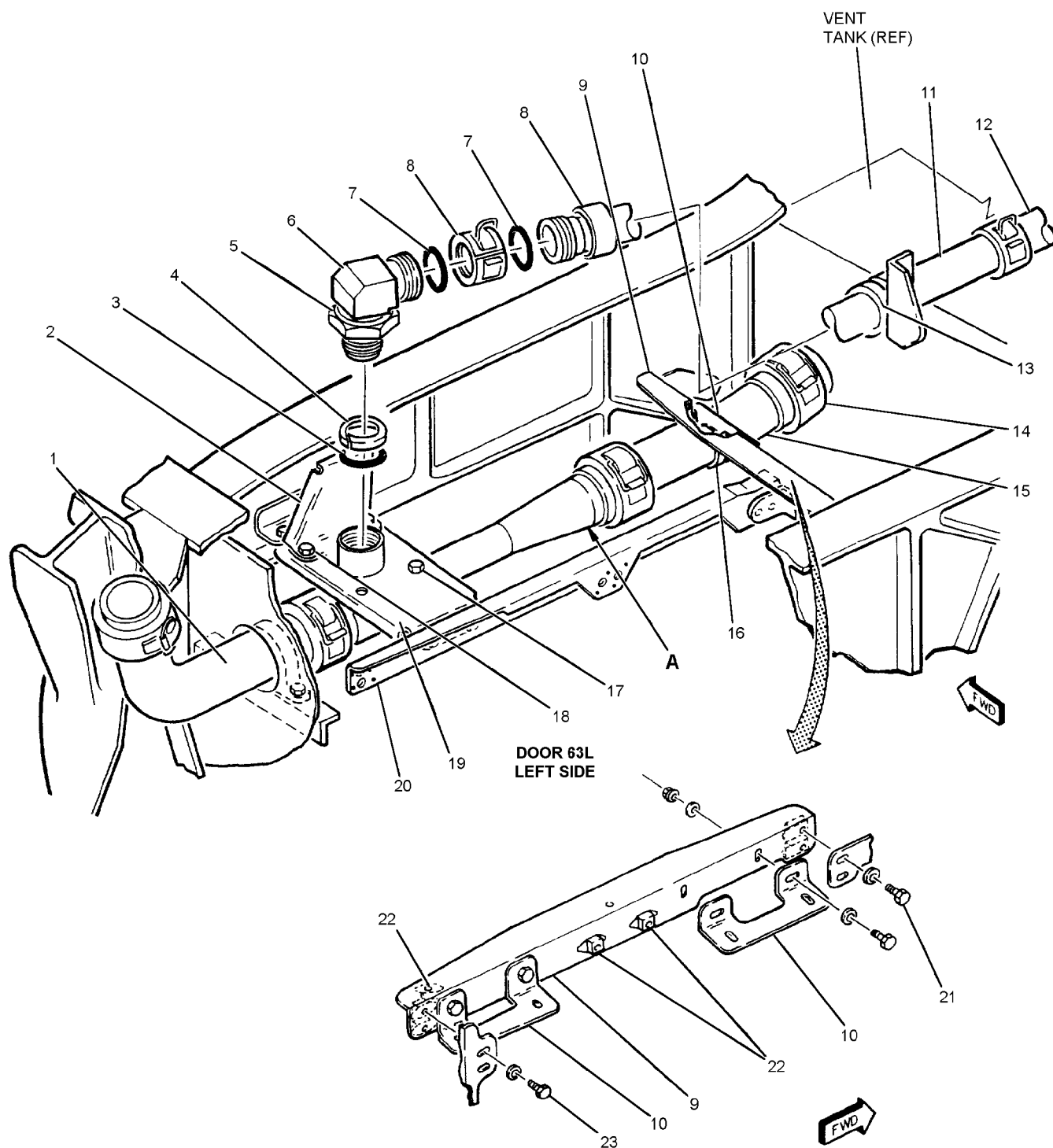


Figure 1. Pressurization System Air Pump (5BAS511 or 5BAT512) (Sheet 2)

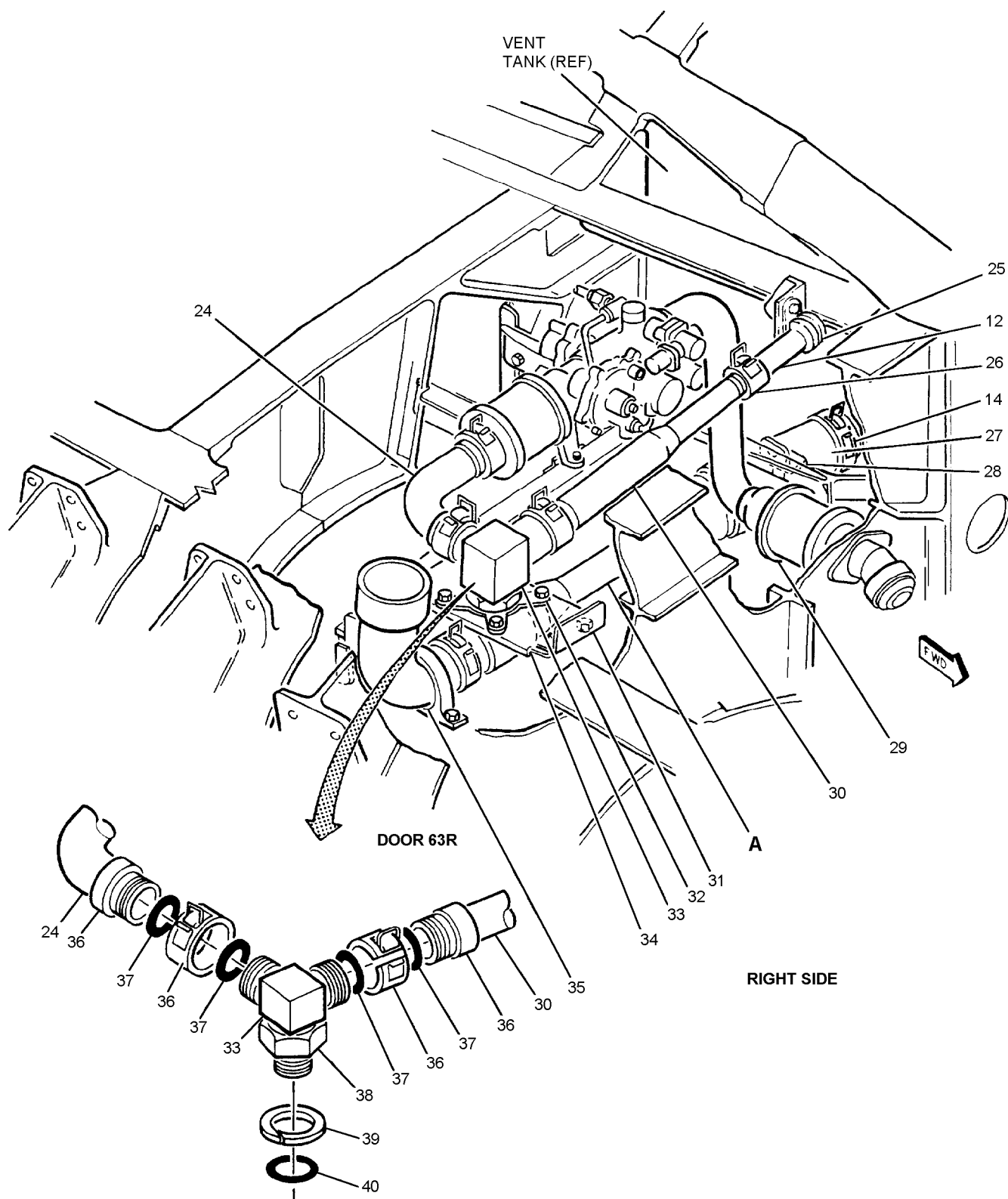
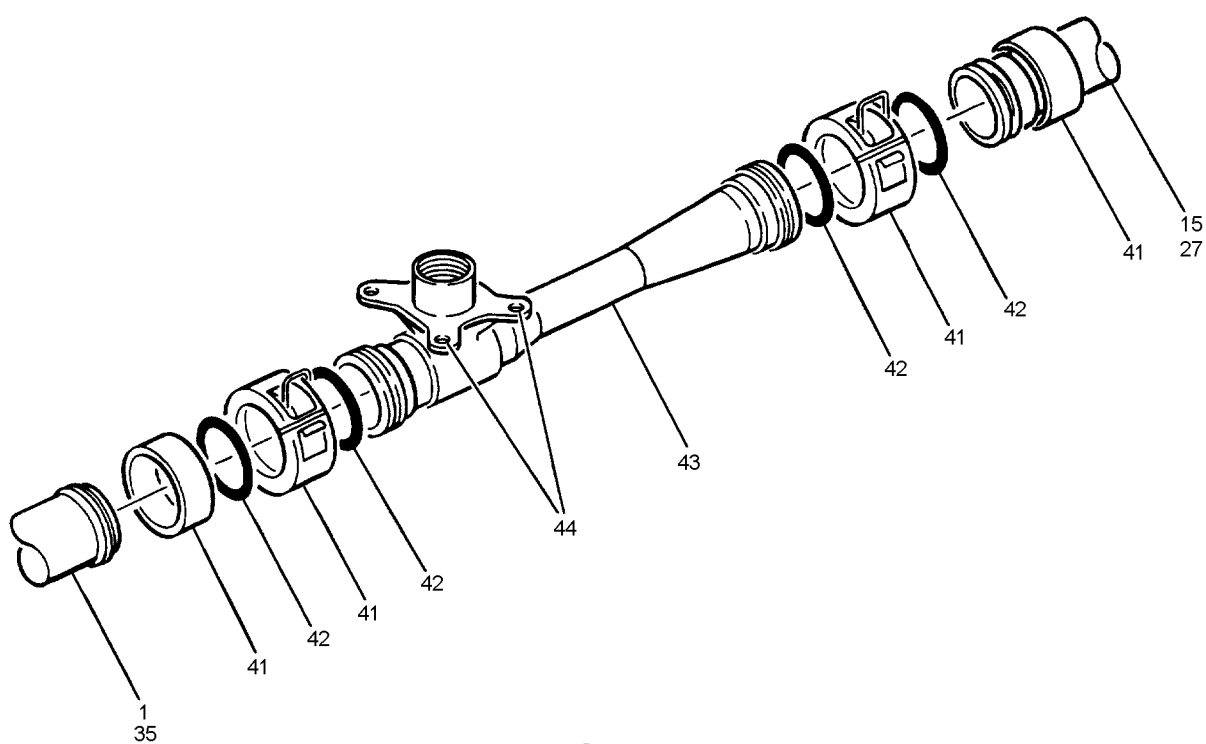


Figure 1. Pressurization System Air Pump (5BAS511 or 5BAT512) (Sheet 3)



A

TYPICAL LEFT OR RIGHT SIDE

Figure 1. Pressurization System Air Pump (5BAS511 or 5BAT512) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		PRESSURIZATION SYSTEM AIR PUMP			
		(5BAS511 OR 5BAT512)			
1	74A586526-1019	. TUBE ASSEMBLY, METAL - VENT X31.5	1		XBOZZ
		TO VERT STAB INTERFACE (76301)			
		(LEFT SIDE ONLY) (SUPERSEDES			
		74A586526-1007, 74A586526-1011, AND			
		74A586326-1017)			
	W901K32DE	. COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE) (USE WITH INDEX 1)			
		(LEFT SIDE ONLY)			
	14J12-32A	. COUPLING, CLAMP, GROOVED (24984)	1		PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE) (USE WITH INDEX 1)			
		(LEFT SIDE ONLY)			
	W901F32DE	. COUPLING, CLAMP, GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M550-32D)			
		(INCLUDES SLEEVE) (USE WITH INDEX 1)			
		(LEFT SIDE ONLY)			
	MS29513-226	. PACKING (USE WITH INDEX 1)	1		PAOZZ
2	74A885602-2479	. BRACKET, (76301) (LEFT SIDE ONLY)	1		MGOZZ
3	MS29512-12	. PACKING (LEFT SIDE ONLY)	1		PAOZZ
4	MS28773-12	. RETAINER (LEFT SIDE ONLY)	1		PAOZZ
5	74A586542-2003	. NUT, PLAIN, HEXAGON - LOCKING, PUMP	1		PAOZZ
		ELBOW, VENT TANK (76301)			
		(LEFT SIDE ONLY)			
6	74A586539-2001	. ELBOW, FUEL LINE - PRESS, VENT TANK,	1		PAOZZ
		LH (76301) (LEFT SIDE ONLY)			
7	M25988/1-214	. PACKING (LEFT SIDE ONLY)	2		PAOZZ
8	W901K16DE	. COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE) (LEFT SIDE ONLY)			
	14J12-16A	. COUPLING, CLAMP, GROOVED (24984)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE) (LEFT SIDE ONLY)			
	W901F16DE	. COUPLING, CLAMP, GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M550-16D)			
		(INCLUDES SLEEVE) (LEFT SIDE ONLY)			
9	74A586728-1029	. SUPPORT - FUEL LINE, PRESSURIZATION	1		XBOOO
		SYSTEM (76301) (LEFT SIDE ONLY)			
	MS21062L3	. NUT, PLATE (USE WITH INDEX 9)	2		PAOZZ
	MS21060L3	. NUT, PLATE (USE WITH INDEX 9)	6		PAOZZ
	MS20426AD3 #	. RIVET (AP)	16		-
10	74A586731-2183	. BRACKET (76301) (LEFT SIDE ONLY)	2		XBOZZ
		(SUPERSEDES 74A586731-2023,			
		74A586731-2163, AND 74A586731-2169)			
	NAS673V2	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	4		PAOZZ
	NAS1291C3M	. NUT (AP)	2		PAOZZ
11	74A586528-1007	. TUBE ASSEMBLY, METAL - CROSSOVER,	1		PAOZZ
		AIR PRESSURIZATION (76301)			
		(LEFT SIDE ONLY) (REPLACES			
		74A586528-1003)			

Figure 1. Pressurization System Air Pump (5BAS511 or 5BAT512) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USE ON CODE	SM&R CODE
		1 2 3 4 5 6 7			
	74A586528-1003	. TUBE ASSEMBLY, METAL - CROSSOVER,	1	A	PAOZZ
		AIR PRESSURIZATION (76301) (LEFT SIDE ONLY) (USE UNTIL EXHAUSTED)			
	W901K16DE	. COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE) (USE WITH INDEX 11)			
	14J12-16A	. COUPLING, CLAMP, GROOVED (24984)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE) (USE WITH INDEX 11)			
	W901F16DE	. COUPLING, CLAMP, GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M550-16D)			
		(INCLUDES SLEEVE) (USE WITH INDEX 11)			
	M25988/1-214	. PACKING (USE WITH INDEX 11)	2		PAOZZ
12	74A586528-1009	. TUBE ASSEMBLY, METAL - CROSSOVER,	1		PAOZZ
		AIR PRESSURIZATION (76301) (RIGHT SIDE ONLY) (REPLACES 74A586528-1005)			
	74A586528-1005	. TUBE ASSEMBLY, METAL - CROSSOVER,	1	A	PAOZZ
		AIR PRESSURIZATION (76301) (RIGHT SIDE ONLY) (USE UNTIL EXHAUSTED)			
13	MS21919WDG16	. CLAMP (LEFT SIDE ONLY)	1		PAOZZ
	NAS673V5	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
	NAS43DD3-16	. SPACER (AP) (USE WITH INDEX 13)	1		PAOZZ
	A11144-7-3	. NUT, CLIP, (72962) (MCDONNELL SPEC	1	*	PAOZZ
		ST3M523C3M) (USE WITH INDEX 13)			
	130091	. SEE ABOVE (76530)	1	*	PAOZZ
14	W901K32DE	. COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE)			
	14J12-32A	. COUPLING, CLAMP, GROOVED (24984)	1		PAOZZ
		(MCDONNELL SPEC 7M765-32D)			
		(INCLUDES SLEEVE)			
	W901F32DE	. COUPLING, CLAMP, GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M550-32D)			
		(INCLUDES SLEEVE)			
	MS29513-226	. PACKING (USE WITH INDEX 14)	2		PAOZZ
15	74A586522-1019	. TUBE ASSEMBLY, METAL - VENT TANK	1		XBOZZ
		PORT TO AIR PRESS PUMP (76301)			
		(LEFT SIDE ONLY) (SUPERSEDES			
		74A586522-1001, 74A586522-1005,			
		74A586522-1009, 74A586522-1013,			
		74A586522-1015, AND 74A586522-1017)			
16	751-32-8	. STRAP, RETAINING (83930) (MCDONNELL	1	*	PAOZZ
		SPEC 9M368D32) (LEFT SIDE ONLY)			
	JM44SC13D32	. STRAP, RETAINING (22175) (MCDONNELL	1	*	PAOZZ
		SPEC 9M368D32) (LEFT SIDE ONLY)			
	TA12C53D32	. STRAP, RETAINING (84971) (MCDONNELL	1	*	PAOZZ
		SPEC 9M368D32) (LEFT SIDE ONLY)			
	NAS673V4	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	4		PAOZZ
	NAS1291C3M	. NUT (AP)	2		PAOZZ
17	NAS674V1	. BOLT (LEFT SIDE ONLY)	2		PAOZZ
	AN960JD416	. WASHER (USE WITH INDEX 17)	2		PAOZZ

Figure 1. Pressurization System Air Pump (5BAS511 or 5BAT512) (Sheet 6)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
18	NAS674V3	.	BOLT (LEFT SIDE ONLY)						2		PAOZZ
	AN960JD416	.	WASHER (USE WITH INDEX 18)						2		PAOZZ
19	74A586731-1069	.	BRACKET - FUEL PRESSURE LINE,						1		XB000
			PRESSURIZATION SYSTEM (76301)								
			(LEFT SIDE ONLY) (SUPERSEDES								
			74A586731-1027)								
	NAS674V2	.	BOLT (AP)						4		PAOZZ
	AN960JD416L	.	WASHER (AP)						4		PAOZZ
	MS21060L4	.	NUT, PLATE (USE WITH INDEX 19)						2		PAOZZ
	MS20426AD3 #	.	RIVET (AP)						2		-
20	74A586728-1031	.	SUPPORT, FUEL LINE, PRESSURIZATION						1		XB000
			SYSTEM (76301) (LEFT SIDE ONLY)								
	NAS673V2	.	BOLT (AP)						4		PAOZZ
	AN960JD10L	.	WASHER (AP)						4		PAOZZ
21	NAS673V2	.	BOLT						2		PAOZZ
	AN960JD10L	.	WASHER (USE WITH INDEX 21)						2		PAOZZ
	MS21062L3	.	NUT, PLATE (USE WITH INDEX 21)						2		PAOZZ
	MS20426AD3 #	.	RIVET (AP)						2		-
22	MS21060L3	.	NUT, PLATE						3		PAOZZ
	MS20426AD3 #	.	RIVET (AP)						2		-
23	NAS673V2	.	BOLT						2		PAOZZ
	AN960JD10L	.	WASHER (USE WITH INDEX (23)						2		PAOZZ
	MS21060L3	.	NUT, PLATE (USE WITH INDEX 23)						2		PAOZZ
	MS20426AD3 #	.	RIVET (AP)						2		-
24	74A586529-1003	.	TUBE ASSEMBLY, METAL - AIR PRESS						1		PAOZZ
			SYSTEM, VENT TANK (76301)								
			(RIGHT SIDE ONLY) (REPLACES								
			74A586529-1001)								
	74A586529-1001	.	TUBE ASSEMBLY, METAL - AIR PRESS						1	A	PAOZZ
			SYSTEM, VENT TANK (76301)								
			(RIGHT SIDE ONLY) (USE UNTIL								
			EXHAUSTED)								
	M25988/1-222	.	PACKING (USE WITH INDEX 24)						2		PAOZZ
25	MS21919WDG16	.	CLAMP (RIGHT SIDE ONLY)						1		PAOZZ
	NAS673V5	.	BOLT (AP)						1		PAOZZ
	AN960JD10L	.	WASHER (AP)						1		PAOZZ
	NAS43DD3-16	.	SPACER (AP) (USE WITH INDEX 25)						1		PAOZZ
	A11144-7-3	.	NUT, CLIP (72962) (MCDONNELL SPEC						1	*	PAOZZ
			ST3M523C3M) (USE WITH INDEX 25)								
	130091	.	SEE ABOVE (76530)						1	*	PAOZZ
26	W901K16DE	.	COUPLING, CLAMP, GROOVED (79326)						1		PAOZZ
			(MCDONNELL SPEC 7M765-16D)								
			(INCLUDES SLEEVE) (RIGHT SIDE ONLY)								
	14J12-16A	.	COUPLING, CLAMP, GROOVED (24984)						1		PAOZZ
			(MCDONNELL SPEC 7M765-16D)								
			(INCLUDES SLEEVE) (RIGHT SIDE ONLY)								
	W901F16DE	.	COUPLING, CLAMP, GROOVED (79326)						1	*	PAOZZ
			(MCDONNELL SPEC 7M550-16D)								
			(INCLUDES SLEEVE) (RIGHT SIDE ONLY)								
	M25988/1-214	.	PACKING (USE WITH INDEX 26)						2		PAOZZ

Figure 1. Pressurization System Air Pump (5BAS511 or 5BAT512) (Sheet 7)

INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USE ON CODE	SM&R CODE
		1 2 3 4 5 6 7			
27	74A586522-1019	. TUBE ASSEMBLY, METAL - VENT TANK PORT TO AIR PRESS PUMP (76301) (RIGHT SIDE ONLY) (SUPERSEDES 74A586522-1003, 74A586522-1007, 74A586522-1011, AND 74A586522-1017	1		XBOZZ
	W901K32DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-32D) (INCLUDES SLEEVE) (USE WITH INDEX 27) (RIGHT SIDE ONLY)	1		PAOZZ
	14J12-32A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-32D) (INCLUDES SLEEVE) (USE WITH INDEX 27) (RIGHT SIDE ONLY)	1		PAOZZ
	W901F32DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-32D) (INCLUDES SLEEVE) (USE WITH INDEX 27) (RIGHT SIDE ONLY)	1	*	PAOZZ
	MS29513-226	. PACKING (USE WITH INDEX 27)	2		PAOZZ
28	74A586731-2169	. BRACKET - FUEL PRESSURE LINE, PRESSURIZATION SYSTEM (76301) (RIGHT SIDE ONLY) (SUPERSEDES 74A586731-2023 AND 74A586731-2163)	1		XBOZZ
	NAS673V2	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	4		PAOZZ
	NAS1291C3M	. NUT (AP)	2		PAOZZ
29	751-32-8	. STRAP, RETAINING (83930) (MCDONNELL SPEC 9M368D32) (RIGHT SIDE ONLY)	1	*	PAOZZ
	JM44SC13D32	. STRAP, RETAINING (22175) (MCDONNELL SPEC 9M368D32) (RIGHT SIDE ONLY)	1	*	PAOZZ
	TA12C53D32	. STRAP, RETAINING (84971) (MCDONNELL SPEC 9M368D32) (RIGHT SIDE ONLY)	1	*	PAOZZ
	NAS673V4	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	4		PAOZZ
	NAS1291C3M	. NUT (AP)	2		PAOZZ
30	74A586541-1003	. TUBE ASSEMBLY, METAL - FUEL PRESSURE SYS, Y561.50 (76301) (RIGHT SIDE ONLY) (REPLACES 74586541-1001)	1		PAOZZ
	74A586541-1001	. TUBE ASSEMBLY, METAL - FUEL PRESSURE SYS, Y561.50 (76301) (RIGHT SIDE ONLY) (USE UNTIL EXHAUSTED)	1	A	PBOZZ
31	NAS674V2	. BOLT (RIGHT SIDE ONLY)	4		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 31)	4		PAOZZ
32	NAS674V1	. BOLT (RIGHT SIDE ONLY)	4		PAOZZ
	AN960JD416	. WASHER (USE WITH INDEX 32)	4		PAOZZ
33	74A586538-2001	. MANIFOLD FLUID, AIRCRAFT - FUEL PRESSURE, VENT TANK (76301) (RIGHT SIDE ONLY)	1		PBOZZ
34	74A586731-1028	. BRACKET - FUEL PRESSURE LINE, PRESSURIZATION SYSTEM (76301) (RIGHT SIDE ONLY)	1	A	XBOOO

Figure 1. Pressurization System Air Pump (5BAS511 or 5BAT512) (Sheet 8)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
	74A586731-2070	. BRACKET (76301) (USE WITH INDEX 34) (RIGHT SIDE ONLY)	1	A	XBOZZ
	74A586731-1066	. BRACKET - FUEL PRESSURE LINE PRESSURIZATION SYSTEM (76301) (RIGHT SIDE ONLY)	1	B	XBOOO
	74A586731-2142	. BRACKET (76301) (USE WITH INDEX 34) (RIGHT SIDE ONLY)	1	B	XBOZZ
	MS21060L4 #	. NUT, PLATE (USE WITH INDEX 34)	2		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
35	74A586526-1021	. TUBE ASSEMBLY, METAL - VENT X31.5 TO VERT STAB INTERFACE (76301) (RIGHT SIDE ONLY) (SUPERSEDES 74A586526-1009, 74A586526-1013, AND 74A586526-1015)	1		XBOZZ
36	W901K24DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-24D) (INCLUDES SLEEVE) (RIGHT SIDE ONLY)	2		PAOZZ
	14J12-24A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-24D) (INCLUDES SLEEVE) (RIGHT SIDE ONLY)	2		PAOZZ
	W901F24DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-24D) (INCLUDES SLEEVE) (RIGHT SIDE ONLY)	2	*	PAOZZ
37	M25988/1-222	. PACKING (RIGHT SIDE ONLY)	4		PAOZZ
38	74A586542-2001	. NUT, PLAIN, HEXAGON (76301) (RIGHT SIDE ONLY)	1		PAOZZ
39	MS28773-12	. RETAINER (RIGHT SIDE ONLY)	1		PAOZZ
40	MS29512-12	. PACKING (RIGHT SIDE ONLY)	1		PAOZZ
41	W901K32DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-32D) (INCLUDES SLEEVE)	1		PAOZZ
	14J12-32A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-32D) (INCLUDES SLEEVE)	1		PAOZZ
	W901F32DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-32D) (INCLUDES SLEEVE)	1	*	PAOZZ
42	MS29513-226	. PACKING	2		PAOZZ
43	2760096-102	. EJECTOR, JET - AIR PRESSURIZATION VENT SYSTEM, FUEL (LH) (PRESSURIZATION SYSTEM AIR PUMP) (92003) (MCDONNELL SPEC 74-580134-101) (5BAS511 OR 5BAT512)	1		PAOZZ
44	MS21209F4-10	. INSERT	4		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

Figure 1. Pressurization System Air Pump (5BAS511 or 5BAT512) (Sheet 9)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

CODE	USABLE ON	MODEL
A	161353 THRU 161519	F/A-18A/B
B	161520 & UP	F/A-18A/B

Figure 1. Pressurization System Air Pump (5BAS511 or 5BAT512) (Sheet 10)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

BLEED AIR CHECK VALVE (5VAT506)

FUEL PRESSURIZATION AND VENT SYSTEM

Title	WP Number
Bleed Air Check Valve - 161353 THRU 161741	WP151 01
Bleed Air Check Valve - 161742 AND UP	WP151 02

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
BLEED AIR CHECK VALVE (5VAT506)
FUEL PRESSURIZATION AND VENT SYSTEM
EFFECTIVITY: 161353 THRU 161741

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

Nomenclature	Part Number or Type Designation	CAGE Code
Torque Wrench, 0 to 100 Foot-Pounds	-	-

1. REMOVAL.

a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).

b. Remove door 42 (A1-F18AC-LMM-010).

c. Remove couplings (4, figure 1, sheet 2) per WP013 00, packing (3), clamp (6), and attaching parts.

Materials Required

Nomenclature	Specification or Part Number
Packing (4)	M83248/1-218
Petrolatum, Technical	VV-P-236 (CAGE 81348)

NOTE

Valve should be removed with tube attached for ease of removal.

d. Remove valve (2) with tube (1).

NOTE

Step e is not required when tube and check valve are removed for other maintenance.

- e. Separate check valve (2) from tube (1).

2. INSTALLATION.

- a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).



Petrolatum

1

- b. Lubricate new packings with petrolatum.

- c. If disconnected, install valve (2, figure 1, sheet 2) on tube (1). Torque tube (1) 65 to 67 foot-pounds. (QA)

- d. Install valve (2) with arrow pointing down, tube (1), packings (3), and inspect and install couplings (4) per WP013 00.

- e. Inspect installation for air leaks as listed below:

(1) Operate APU in ECS test mode (A1-F18AC-LMM-000).

(2) On ECS panel assembly, pull BLEED AIR/AUG control switch.

(3) Inspect for air leaks.

(4) Push in BLEED AIR/AUG control switch.

(5) Shut down APU (A1-F18AC-LMM-000).

- f. Install door 42 (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

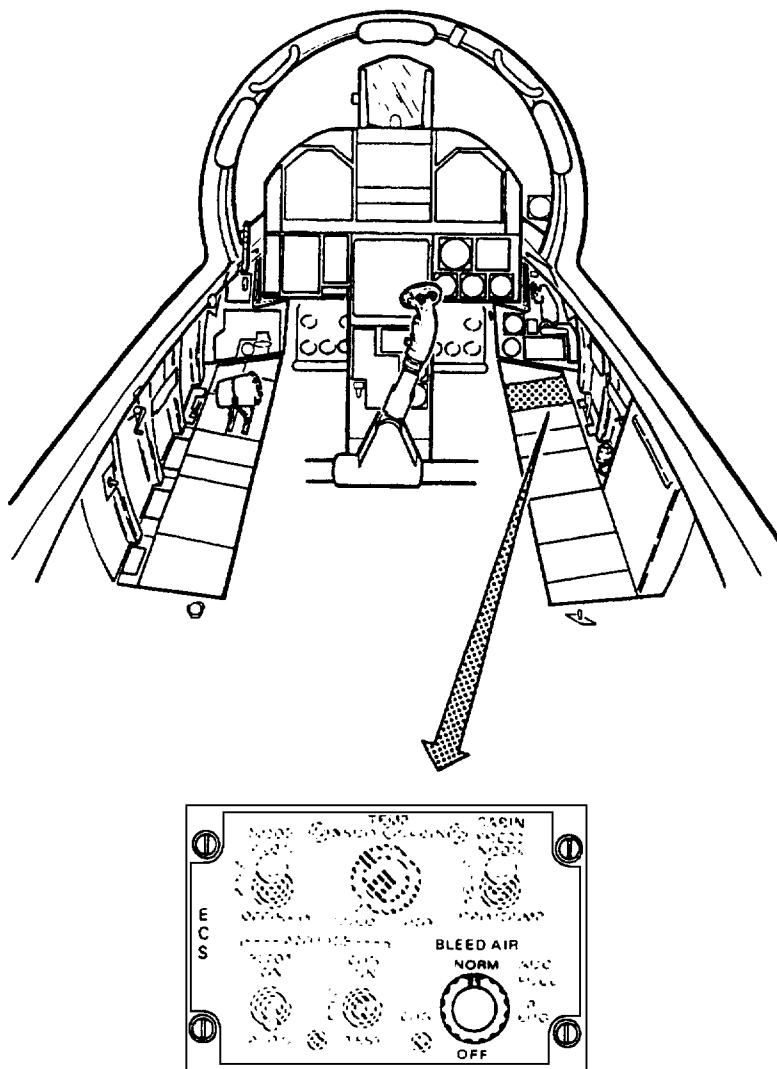


Figure 1. Bleed Air Check Valve (5VAT506) (Sheet 1)

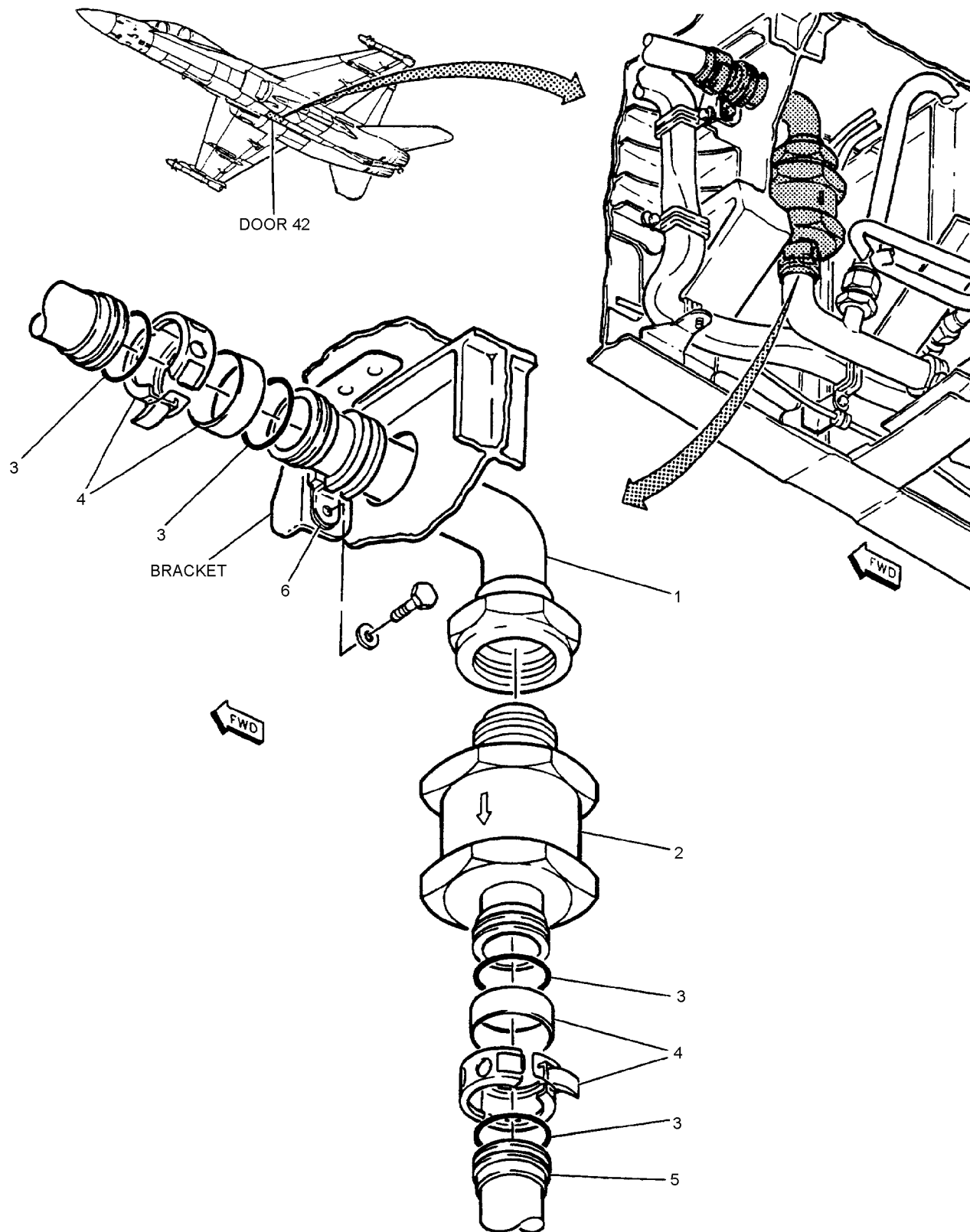


Figure 1. Bleed Air Check Valve (5VAT506) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
1	74A835776-1009	BLEED AIR CHECK VALVE - (5VAT506) TUBE ASSEMBLY, METAL - AIR CONDITION, Y471.520 (76301) (SUPERSEDES 74A835776-1007)	1		XBOZZ
2	CV99-158-20	. VALVE, CHECK BLEED AIR, FUEL SYSTEMS (BLEED AIR CHECK VALVE) (91816) (MCDONNELL SPEC 74B580185-115) (5VAT506)	1		PAOZZ
	P112-533-20	. SEE ABOVE (MCDONNELL SPEC 74B580185-103)	1	*	PAOZZ
3	M25988/1-218	. PACKING	4		PAOZZ
4	W901K20DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-20D) (INCLUDES SLEEVE)	2		PAOZZ
	14J12-20A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-20D) (INCLUDES SLEEVE)	2		PAOZZ
	W901F20DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-20D) (INCLUDES SLEEVE)	2	*	PAOZZ
5	74A586583-1003	. MANIFOLD - FUEL PRESSURE SYSTEM, Y470.50 - Y488.00 (76301)	1		PAOZZ
6	JM44LC33WD20	. CLAMP, LOOP (22175) (MCDONNELL SPEC ST9M630D20)	1		PAOZZ
	NAS673V3	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
* ALTERNATE OR EQUIVALENT PARTS. (WP002 00)					

Figure 1. Bleed Air Check Valve (5VAT506) (Sheet 3)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
BLEED AIR CHECK VALVE (5VAT506)
FUEL PRESSURIZATION AND VENT SYSTEM
EFFECTIVITY: 161742 AND UP

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

Nomenclature	Part Number or Type Designation
Torque Wrench, 0 to 100 Foot-Pounds	-

Materials Required (Cont)

Nomenclature	Specification or Part Number
Petrolatum, Technical	VV-P-236 (CAGE 81348)

Materials Required

Nomenclature	Specification or Part Number
Packing (2)	M83248/1-218

1. REMOVAL.

a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).

b. Remove door 42 (A1-F18AC-LMM-010).

c. Remove couplings (4, figure 1, sheet 2) per WP013 00.

d. Disconnect tube (1), nut and remove valve (2), and packing (3).

2. INSTALLATION.

a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).



Petrolatum

1

b. Lubricate new packings with petrolatum.

c. Install valve (2, figure 1, sheet 2) with arrow pointing down, packing (3), and install coupling (4) per WP013 00.

d. Torque tube (1), nut 55 to 67 foot-pounds. (QA)

e. Inspect valve installation for air leaks as listed below:

(1) Operate APU in ECS test mode (A1-F18AC-LMM-000).

(2) On ECS panel assembly, pull BLEED AIR/AUG control switch.

(3) Inspect for air leaks.

(4) Push in BLEED AIR/AUG control

(5) Shut down APU (A1-F18AC-LMM-000).

f. Install door 42 (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

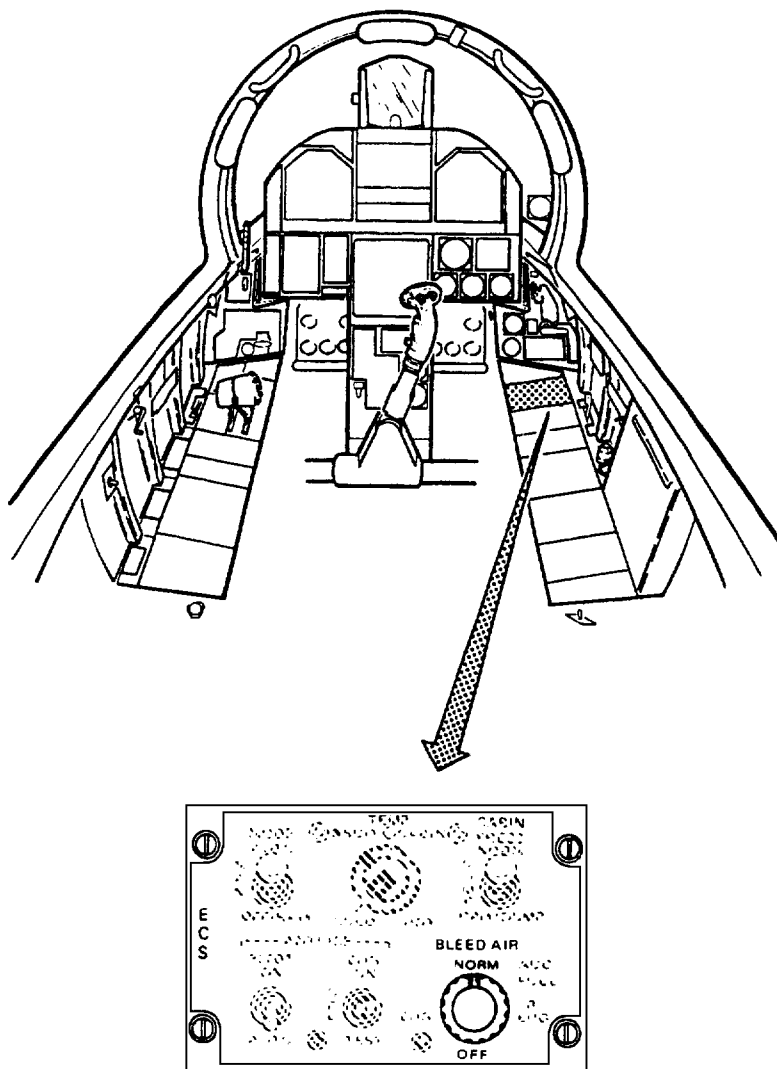


Figure 1. Bleed Air Check Valve (5VAT506) (Sheet 1)

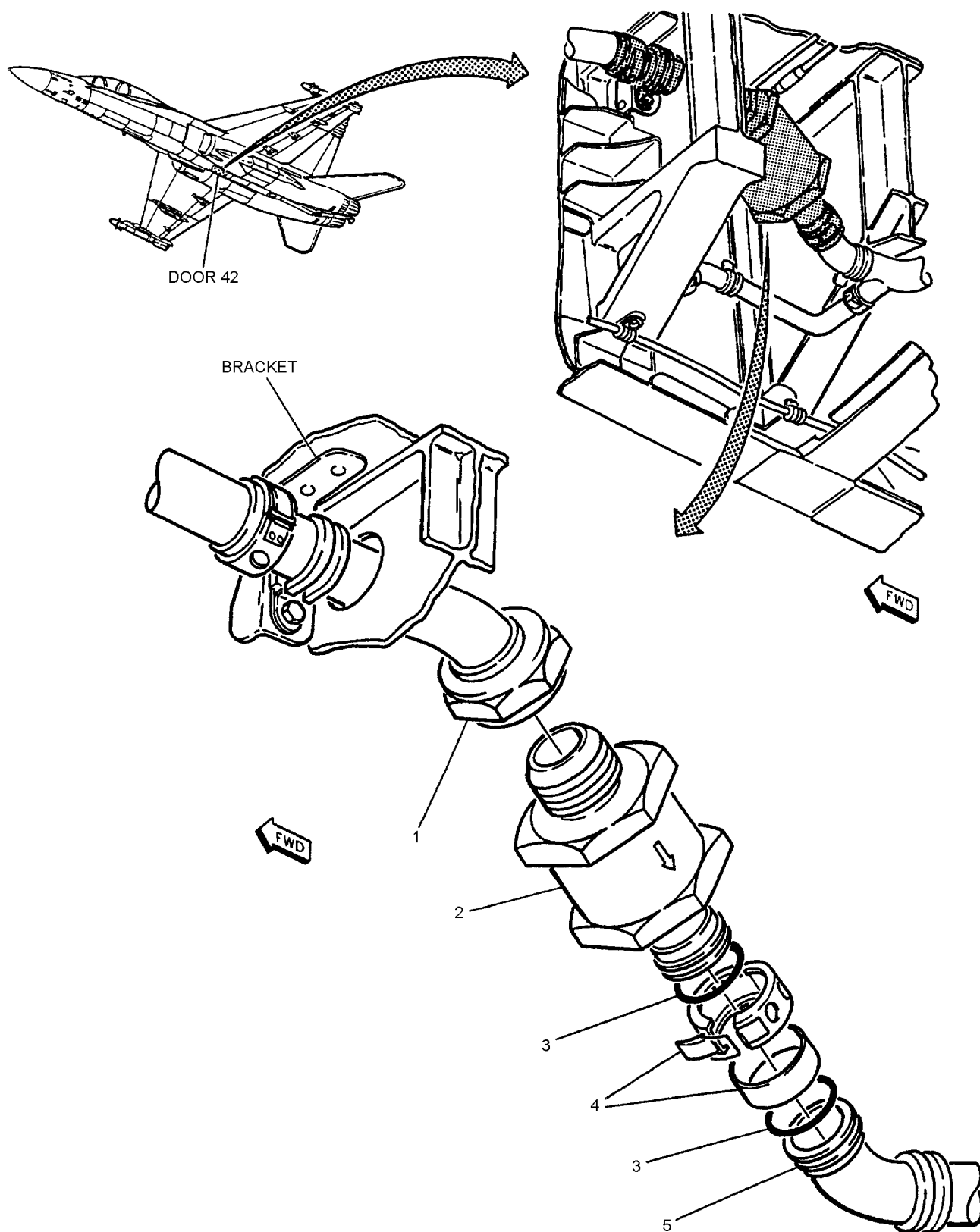


Figure 1. Bleed Air Check Valve (5VAT506) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
1	74A835776-1011	BLEED AIR CHECK VALVE (5VAT506) TUBE ASSEMBLY, METAL - AIR CONDITION, Y471.520 (76301)	1		XBOZZ
2	CV99-158-20	. VALVE, CHECK BLEED AIR, FUEL SYSTEMS (BLEED AIR CHECK VALVE) (91816) (MCDONNELL SPEC 74B580185-115) (5VAT506)	1		PAOZZ
	P112-533-20	. SEE ABOVE (MCDONNELL SPEC 74B580185-103)	1	*	PAOZZ
3	M83248/1-218	. PACKING	2		PAOZZ
4	W901K20DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-20D) (INCLUDES SLEEVE)	1		PAOZZ
	14J12-20A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-20D) (INCLUDES SLEEVE)	1		PAOZZ
	W901F20DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-20D) (INCLUDES SLEEVE)	1	*	PAOZZ
5	74A586583-1007	. MANIFOLD - FUEL PRESSURE SYSTEM, Y470.50 - Y488.00 (76301)	1		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

Figure 1. Bleed Air Check Valve (5VAT506) (Sheet 3)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
INTERNAL AIR PRESSURIZATION CHECK VALVE (5VAT513)
FUEL PRESSURIZATION AND VENT SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Procedures	A1-F18AC-LMM-000
Line Maintenance Access Doors	A1-F18AC-LMM-010

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Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29512-24
Packing (4)	M25988/1-222
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

a. Make sure hydraulic and electrical power are not applied (A1-F18AC-LMM-000).

b. Remove door 63R (A1-F18AC-LMM-010).

c. Remove couplings (2, figure 1, sheet 2) per WP013 00 and remove packings (1) from manifold (5), tube (6) and valve (3).

d. Remove valve (3) from internal fuel tanks air pressure regulator.

e. Remove packing (4) from valve (3).

2. INSTALLATION.

a. Make sure hydraulic and electrical power are not applied (A1-F18AC-LMM-000).



Petrolatum

1

- b. Lubricate all new packings with petrolatum.
- c. Install packing (4, figure 1, sheet 2) on valve (3).
- d. Install valve (3), with arrow on valve pointing outboard, on internal fuel tanks air pressure regulator.
- e. Install packings (1) and inspect and install couplings (2) per WP013 00 on manifold (5), tube (6) and valve (3).
- f. Test installation for air leaks using substeps below:

(1) Operate APU in ECS test mode (A1-F18AC-LMM-000).

(2) On ECS control box panel assembly, pull BLEED AIR/AUG control switch.

(3) Test for air leaks.

(4) Push in BLEED AIR/AUG control switch.

(5) Shut down APU (A1-F18AC-LMM-000).

g. Install door 63R (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

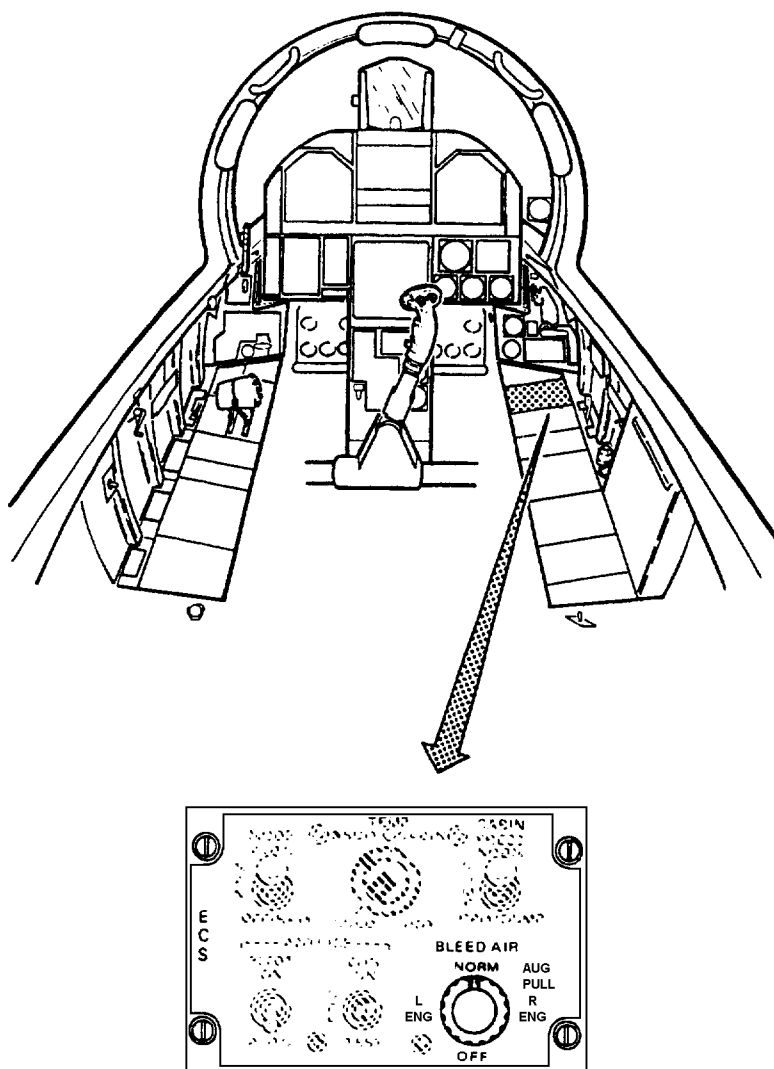


Figure 1. Internal Air Pressurization Check Valve (5VAT513) (Sheet 1)

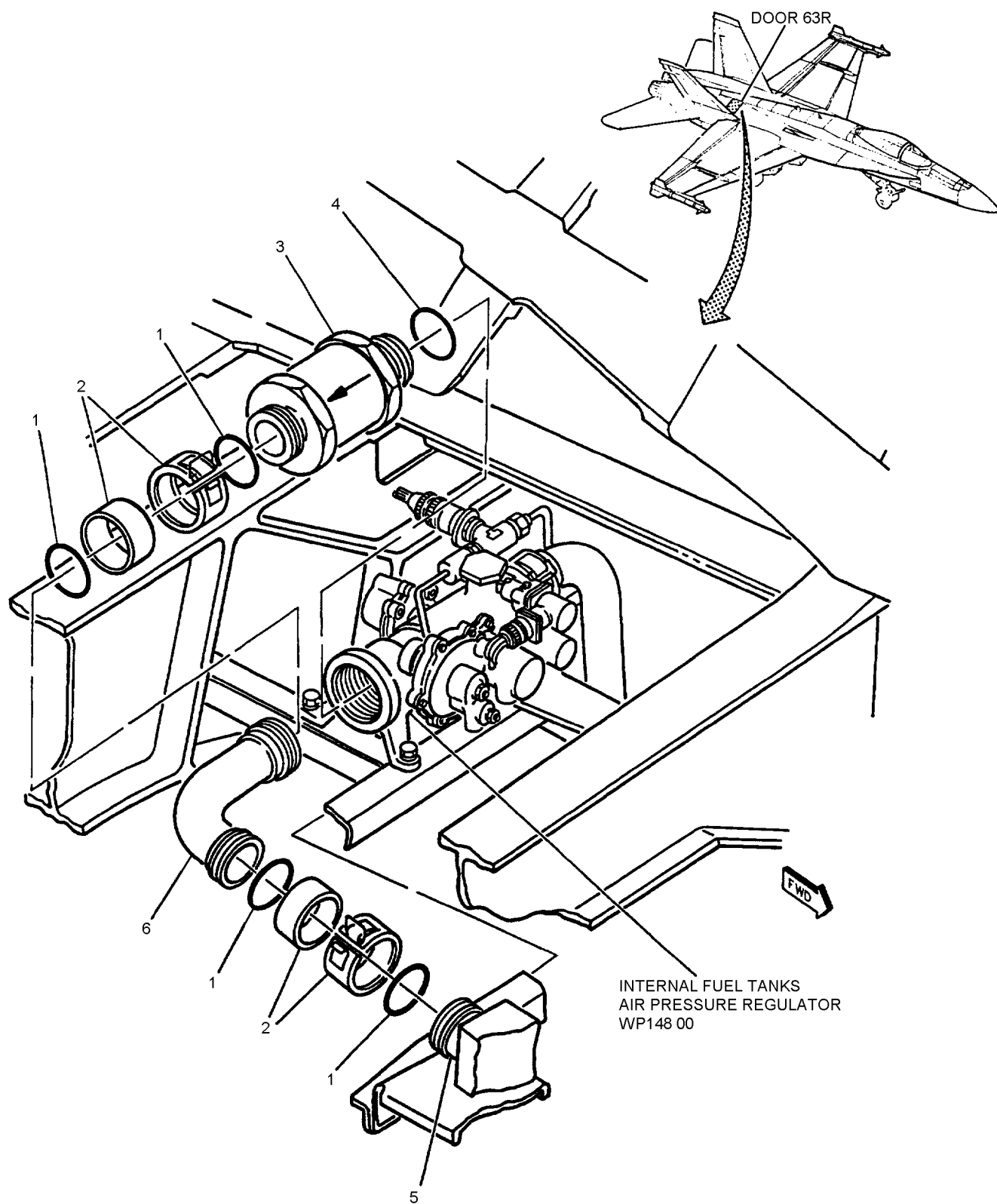


Figure 1. Internal Air Pressurization Check Valve (5VAT513) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		INTERNAL AIR PRESSURIZATION CHECK									
		VALVE (5VAT513)									
1	M25988/1-222	.	PACKING						4		PAOZZ
2	W901K24DE	.	COUPLING, CLAMP, GROOVED (79326)						2		PAOZZ
		(MCDONNELL SPEC 7M765-24D)									
		(INCLUDES SLEEVE)									
	14J12-24A	.	COUPLING, CLAMP, GROOVED (24984)						2		PAOZZ
		(MCDONNELL SPEC 7M765-24D)									
		(INCLUDES SLEEVE)									
	W901F24DE	.	COUPLING, CLAMP, GROOVED (79326)						2	*	PAOZZ
		(MCDONNELL SPEC 7M550-24D)									
		(INCLUDES SLEEVE)									
3	CV99-158-24	.	VALVE, CHECK, ENGINE BLEED AIR,						1		PAOZZ
		FUEL SYSTEMS (INTERNAL AIR									
		PRESSURIZATION CHECK VALVE)									
		(91816) (MCDONNELL SPEC 74B580185-117)									
		(5VAT513)									
	P112-533-24	.	SEE ABOVE (MCDONNELL SPEC						1	*	PAOZZ
		74B580185-105)									
4	MS29512-24	.	PACKING						1		PAOZZ
5	74A586538-2001	.	MANIFOLD, FLUID, AIRCRAFT - FUEL						1		PBOZZ
		PRESSURE, VENT TANK (76301)									
6	74A586529-1003	.	TUBE ASSY, METAL - AIR PRESS SYSTEM,						1		PAOZZ
		VENT TANK (76301) (REPLACES									
		74A586529-1001)									
	74A586529-1001	.	TUBE ASSY, METAL - AIR PRESS SYSTEM,						1	A	PAOZZ
		VENT TANK (76301) (USE UNTIL									
		EXHAUSTED)									

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161353 THRU 161519	F/A-18A/B

Figure 1. Internal Air Pressurization Check Valve (5VAT513) (Sheet 3)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
BLEED AIR CHECK VALVE (5VAT507)
FUEL PRESSURIZATION AND VENT SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29512-20
Packing (4)	M25988/1-218
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).

b. Remove door 63R (A1-F18AC-LMM-010).

c. Remove couplings (2, figure 1, sheet 2) per WP013 00 and remove packings (1) from tube (3) and valve (4).

d. Remove valve (4) from connector (6).

e. Remove packing (5) from valve (4).

2. INSTALLATION.

a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).



Petrolatum

1

b. Lubricate new packings with petrolatum.

c. Install packing (5, figure 1, sheet 2) on valve (4).

d. Install valve (4) in connector (6), with arrow on valve pointing aft.

e. Install packings (1) and inspect and install couplings (2) per WP013 00 on tube (3) and valve (4).

f. Inspect installation for air leaks by operating APU in ECS test mode (A1-F18AC-LMM-000).

g. Install door 63R (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

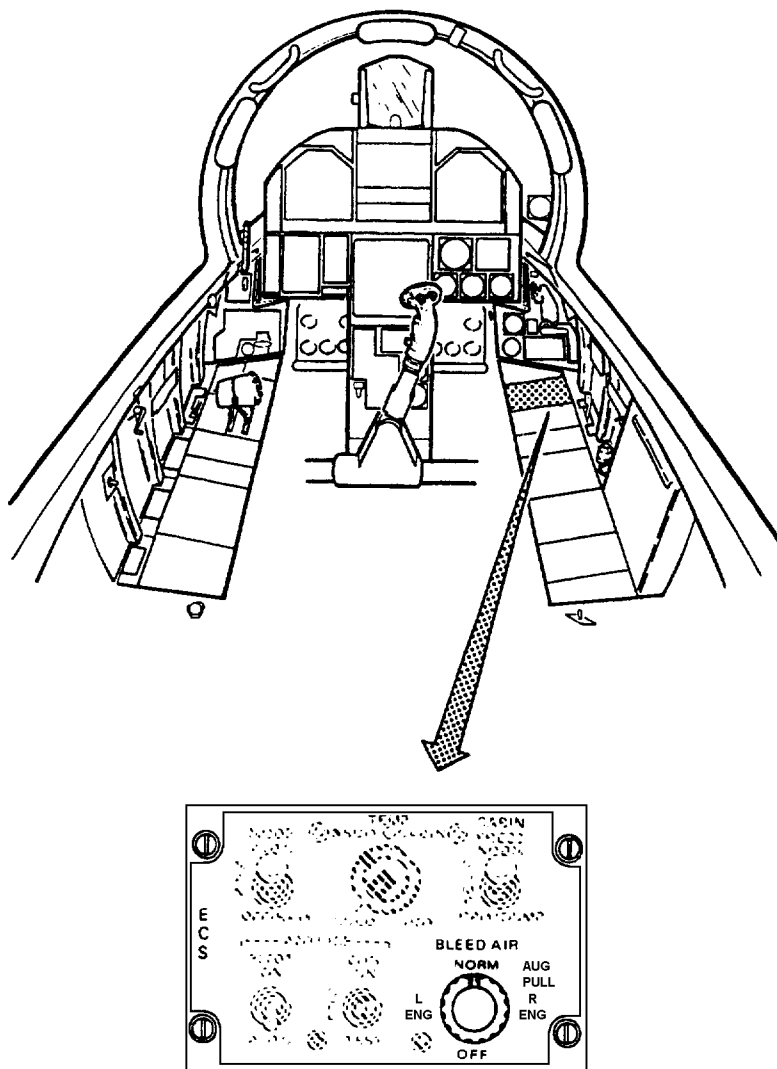


Figure 1. Bleed Air Check Valve (5VAT507) (Sheet 1)

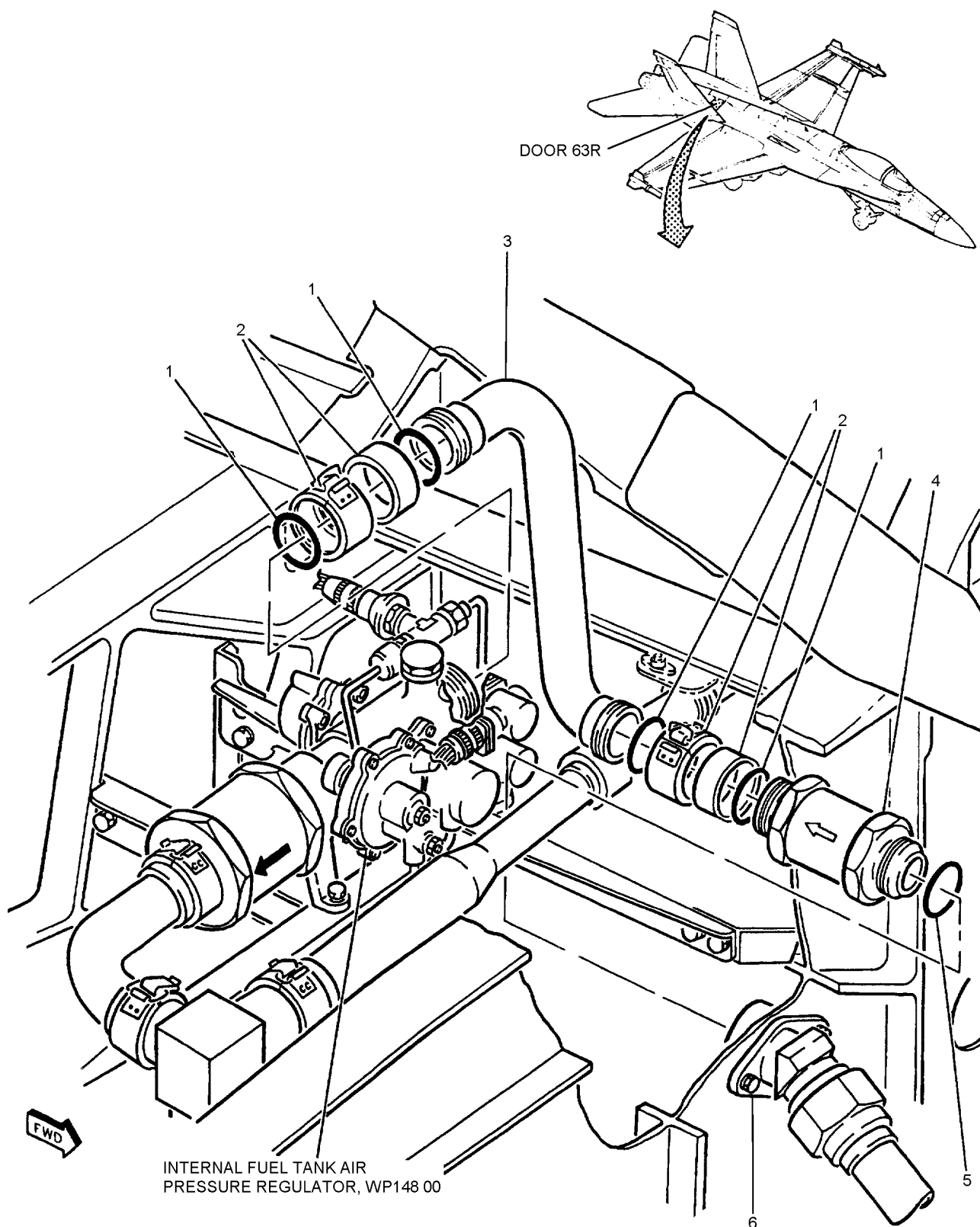


Figure 1. Bleed Air Check Valve (5VAT507) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		BLEED AIR CHECK VALVE (5VAT507)			
1	M25988/1-218	. PACKING	4		PAOZZ
2	W910K20DE	. COUPLING, CLAMP, GROOVED (79326)	2		PAOZZ
		(MCDONNELL SPEC 7M765-20D)			
		(INCLUDES SLEEVE)			
	14J12-20A	. COUPLING, CLAMP, GROOVED (24984)	2		PAOZZ
		(MCDONNELL SPEC 7M765-20D)			
		(INCLUDES SLEEVE)			
	W901F20DE	. COUPLING, CLAMP, GROOVED (79326)	2	*	PAOZZ
		(MCDONNELL SPEC 7M550-20D)			
		(INCLUDES SLEEVE)			
3	74A586501-1001	. TUBE ASSEMBLY, METAL - FUEL PRESS	1		PAOZZ
		SYS, Y557.5 - PRESS REG (76301)			
		(REPLACES 74A586708-1001)			
	74A586708-1001	. TUBE ASSEMBLY, METAL - FUEL PRESS	1	A	PAOZZ
		SYS, Y557.5 - PRESS REG (76301)			
		(USE UNTIL EXHAUSTED)			
4	CV99-158-20	. VALVE, CHECK, BLEED AIR, FUEL	1		PAOZZ
		SYSTEMS (BLEED AIR CHECK VALVE)			
		(91816) (MCDONNELL SPEC 74B580185-115)			
		(5VAT507)			
	P112-533-20	. SEE ABOVE (MCDONNELL SPEC	1	*	PAOZZ
		74B580185-103)			
5	MS29512-20	. PACKING	1		PAOZZ
6	74A586709-1001	. CONNECTOR - TUBE, BULKHEAD - AIR	1		PBOZZ
		PRESS SYS, Y557.5 (76301)			
	NAS673V2	. SCREW (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161353 THRU 161712	F/A-18A/B

Figure 1. Bleed Air Check Valve (5VAT507) (Sheet 3)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****NO. 1 FUEL TANK CLIMB VENT CHECK VALVE (5VAP531)****FUEL PRESSURIZATION AND VENT SYSTEM**

This work package supersedes WP154 00, dated 1 November 1997.

Reference Material

Fuel System	A1-F18AC-460-300
No. 1 Fuel Tank Access Cover F/A-18A	WP003 00
No. 1 Fuel Tank Access Cover TF/A-18A	WP004 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Procedures	A1-F18AC-LMM-000
Structural Hardware	NAVAIR 01-1A-8

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Record of Applicable Technical Directives

None

1. CHECK VALVE.**Support Equipment Required**

Nomenclature	Part Number or Type Designation
---------------------	--

Torque Wrench, 5 to 50 Inch-Pounds	-
--	---

Materials Required

None

2. REMOVAL.

a. Do general preparation for removal (WP013 00).

b. Remove check valve (3, figure 1) by removing bolts (2) and attaching parts.

3. INSTALLATION.

a. Do general preparation for component installation (WP013 00).

b. Prepare mating surfaces of check valve (3, figure 1) and bracket for electrical bond (A1-F18AC-LMM-000).

c. Install check valve (3), bolts (2) and attaching parts. Torque bolts 20 to 30 inch-pounds.

d. Install access cover (WP003 00 or WP004 00).

4. BRACKET ASSEMBLY.**Support Equipment Required**

None

Materials Required

None

5. REMOVAL.

a. Remove bracket (1 or 10, figure 2) and attaching parts.

b. Remove bolts (9) and disconnect supports (2, 6, or 11).

6. INSTALLATION.

a. If disconnected, install supports (2, 6, or 11, figure 2) and bolts (9).

b. Install support (1 or 10) and attaching parts.

7. INSPECTION.**Support Equipment Required**

None

Materials Required

None

a. Inspect brackets (1 or 10, figure 2) per substeps below:

(1) Cracks.

(2) Corrosion.

(3) Sharp edges that could damage the tank.

(4) Stripped plate nuts.

8. REPAIR.**Support Equipment Required**

None

Materials Required

None

NOTE

Repair of brackets is limited to replacement of plate nuts or angle.

9. DISASSEMBLY.

a. If damaged, remove bracket (1 or 10, figure 2) per paragraph 5.

b. If damaged, remove plate nuts (5 or 14), angle (8), and rivets per NAVAIR 01-1A-8.

10. ASSEMBLY.

- a. If removed, install plate nuts (5 or 14, figure 2), angle (8), and rivets per NAVAIR 01-1A-8.
- b. Install bracket (1 or 10) per paragraph 6.

11. ILLUSTRATED PARTS BREAKDOWN.

12. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

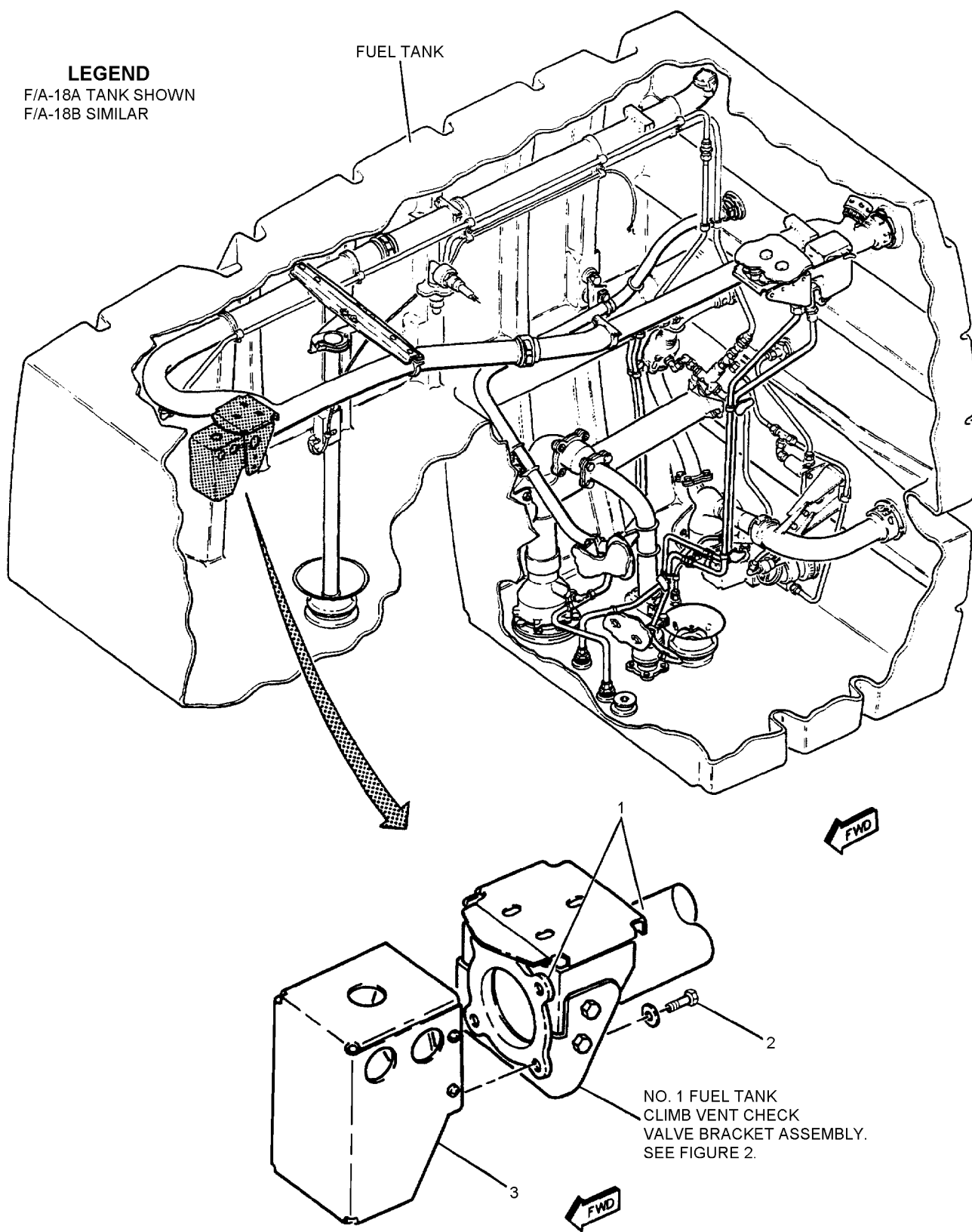


Figure 1. No. 1 Fuel Tank Climb Vent Check Valve (5VAP531) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		NO. 1 FUEL TANK CLIMB VENT CHECK									
		VALVE (5VAP531)									
1	74A582132-1007	.	TUBE ASSY, BRANCHED - VENT, TANK						1	A	XBOZZ
			NO. 1 OUT, TF-18A (76301) (SUPERSEDES								
			74A582132-1005)								
	74A581000-1009	.	TUBE ASSEMBLY - VENT, TANK NO. 1,						1	B	XBOZZ
			OUTLET (76301) (SUPERSEDES								
			74A581000-1007)								
2	NAS674V3	.	BOLT						4		PAOZZ
	AN960JD416	.	WASHER (USE WITH INDEX 2)						4		PAOZZ
3	742100-107	.	VALVE, FLOAT, AIRCRAFT - CLIMB VENT,						1		PAOZZ
			TANK NO. 1 (NO. 1 FUEL TANK CLIMB								
			VENT CHECK VALVE) (96124)								
			(MCDONNELL SPEC 74-580064-105)								
			(5VAP531) (SUPERSEDES -105 AND -103)								
	742100-105	.	SEE ABOVE						1		PAOZZ
	742100-103	.	SEE ABOVE						1		PAOZZ
		CODE	USABLE ON	MODEL							
		A	161354 & UP	F/A-18A/B							
		B	161353 & UP	F/A-18A							

Figure 1. No. 1 Fuel Tank Climb Vent Check Valve (5VAP531) (Sheet 2)

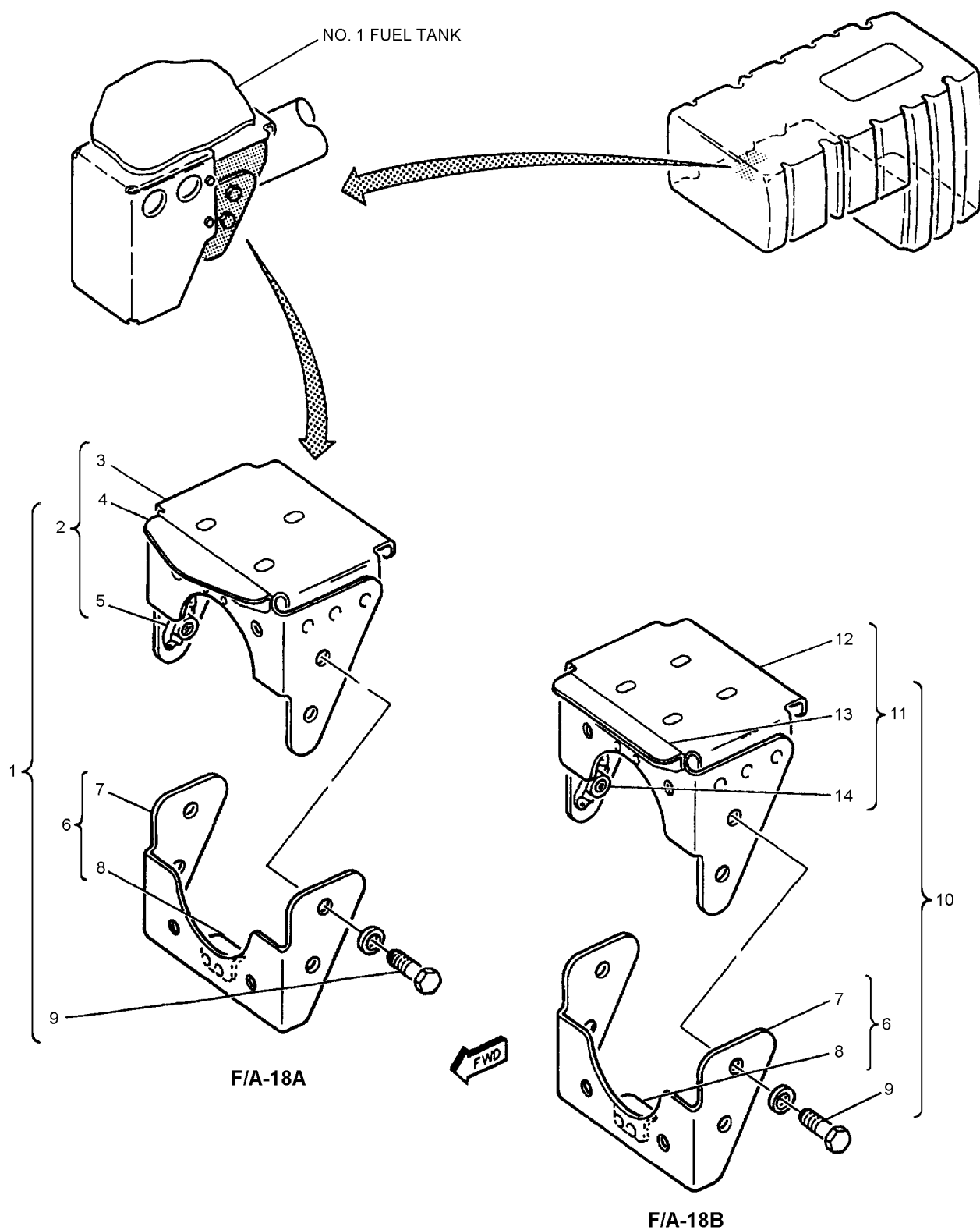


Figure 2. No. 1 Fuel Tank Climb Vent Check Valve Bracket Assembly (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 1 FUEL TANK CLIMB VENT CHECK			
		VALVE BRACKET ASSEMBLY			
1	74A582027-1001	. BRACKET ASSEMBLY - FWD, TUBE ASSY,	1	A	XBOOG
		VENT RETURN, TANK NO. 1 (76301)			
2	74A582027-2001	. SUPPORT ASSY (76301)	1	A	XBOOG
3	74A582027-2005	. SUPPORT (76301)	1	A	MGOZZ
	MS20470AD5 #	. RIVET (AP)	6		-
4	74A582027-2007	. ANGLE (76301)	1	A	MGOZZ
	MS20470AD4 #	. RIVET (AP)	3		-
5	MS21060L4	. NUT, PLATE	4	A	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
6	74A582027-2003	. CHANNEL ASSY (76301)	1		XBOOG
7	74A582027-2011	. CHANNEL (76301)	1		MGOZZ
8	74A582027-2009	. ANGLE (76301)	1		MGOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
9	NAS674V1	. BOLT	4		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 9)	4		PAOZZ
10	74A582164-1001	. BRACKET ASSEMBLY - CLIMB VENT	1	B	XBOOO
		VALVE, Y336.83, TANK NO. 1 (76301)			
11	74A582164-2001	. SUPPORT ASSY (76301)	1	B	XBOOO
12	74A582164-2003	. SUPPORT (76301)	1	B	MGOZZ
	MS20470AD5 #	. RIVET (AP)	6		-
13	74A582164-2005	. ANGLE (76301)	1	B	MGOZZ
	MS20470AD4 #	. RIVET (AP)	3		-
14	MS21060L4	. NUT, PLATE	4	B	PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-

LENGTH/SIZE TO BE DETERMINED AT INSTALLATION.

CODE	USABLE ON	MODEL
A	161353 & UP	F/A-18A
B	161354 & UP	F/A-18B

Figure 2. No. 1 Fuel Tank Climb Vent Check Valve Bracket Assembly (Sheet 2)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
NO. 1 FUEL TANK DIVE VENT CHECK (5VAP530)
FUEL PRESSURIZATION AND VENT SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
No. 1 Fuel Tank Access Cover F/A-18A	WP003 00
No. 1 Fuel Tank Access Cover F/A-18B	WP004 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

None

1. REMOVAL.

a. Do general preparation for removal (WP013 00).

b. Disconnect nut assembly (2, figure 1) and remove check valve (4).

c. Remove packing (3).

Materials Required

Nomenclature	Specification or Part Number
--------------	---------------------------------

Packing	MS29513-326
---------	-------------

Petrolatum, Technical	VV-P-236 (CAGE 81348)
-----------------------	--------------------------

2. INSTALLATION.

a. Do general preparation for component installation (WP013 00).



Petrolatum

1

b. Lubricate new packing with petrolatum.

c. Install packing (3, figure 1), nut assembly (2), and check valve (4). Tighten nut assembly (2) hand-tight.

d. Install access cover (WP003 00 or WP004 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

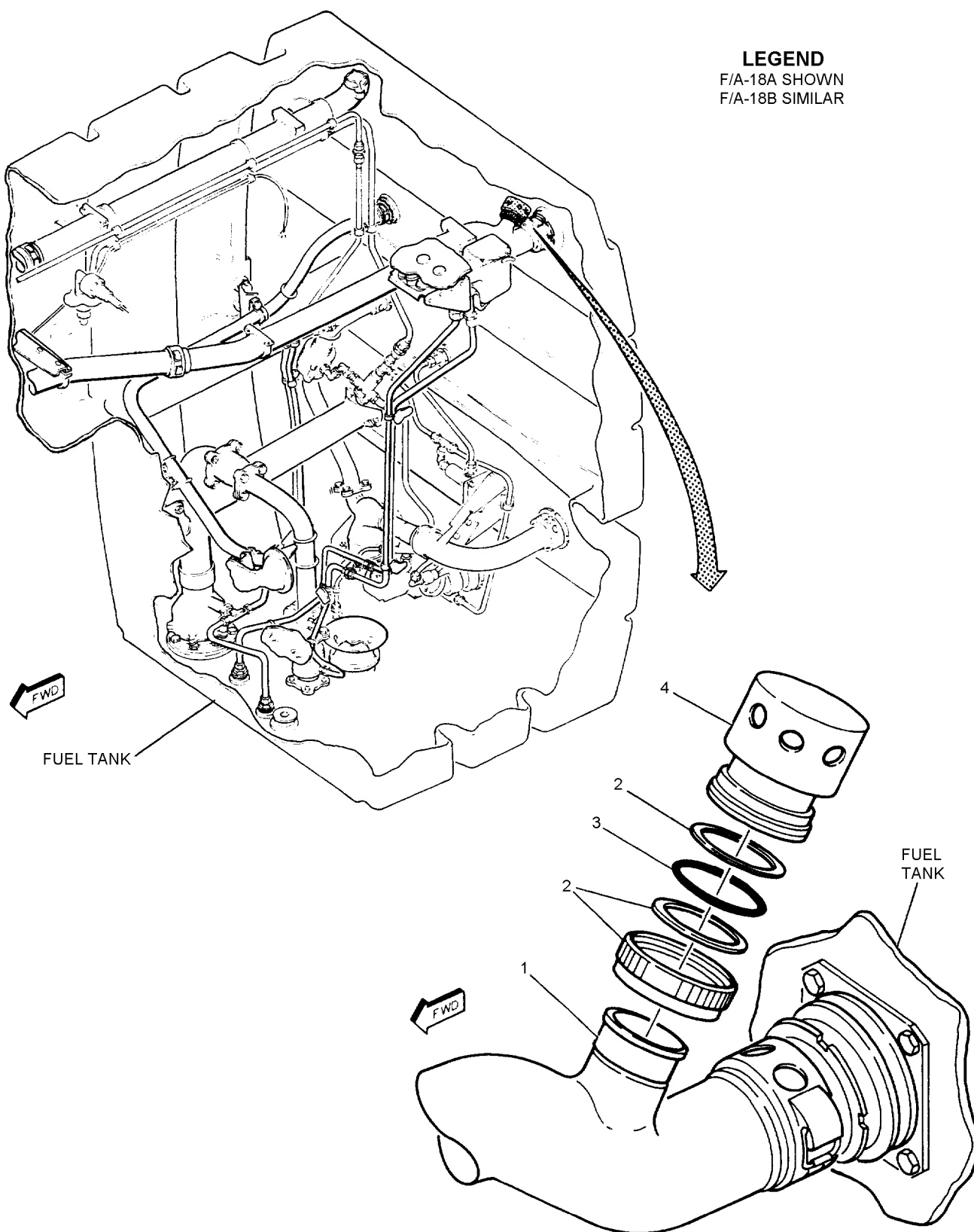


Figure 1. No. 1 Fuel Tank Dive Vent Check Valve (5VAP530) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 1 FUEL TANK DIVE VENT CHECK			
		VALVE (5VAP530)			
1	74A581001-1005	. TUBE ASSEMBLY - VENT, TANK NO. 1	1	A	XBOZZ
		OUTLET (76301) (SUPERSEDES			
		74A581001-1003)			
	74A582132-1007	. TUBE ASSEMBLY, BRANCHED - VENT, TANK	1	B	XBOZZ
		NO. 1 OUT TF-18A (76301)			
2	W702-24D	. NUT ASSEMBLY TUBE COUPLING (79326)	1	*	PAOZZ
		(MCDONNELL SPEC ST7M191-24D)			
		(INCLUDES NUT AND 2 WASHERS)			
	12H72-24D	. SEE ABOVE (24984)	1	*	PAOZZ
3	MS29513-326	. PACKING	1		PAOZZ
4	P72-533	. VALVE, CHECK (NO. 1 FUEL TANK DIVE	1		PAOZZ
		VENT CHECK VALVE) (91816)			
		(MCDONNELL SPEC ST7M350-1A)			
		(5VAP530)			

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161353 & UP	F/A-18A
B	161354 & UP	F/A-18B

Figure 1. No. 1 Fuel Tank Dive Vent Check Valve (5VAP530) (Sheet 2)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
DIVE VENT CHECK VALVE (5VAP555, 5VAP582, 5VAP593)
FUEL PRESSURIZATION AND VENT SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
No. 2 Fuel Tank Access Cover	WP005 00
No. 3 Fuel Tank Access Cover	WP006 00
No. 4 Fuel Tank Aft Access Cover	WP008 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Fuel System	A1-F18AC-460-330
No. 4 Fuel Tank Fuel Quantity Transmitters	WP167 00
Line Maintenance Procedures	A1-F18AC-LMM-000

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Removal	3

Record of Applicable Technical Directives

None

1. NO. 2 FUEL TANK DIVE VENT CHECK VALVE.**Support Equipment Required**

None

Materials Required

Nomenclature	Specification or Part Number
Packings (4)	MS29513-230
Petrolatum, Technical	VV-P-236 (CAGE 81348)

2. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove bolts (1, figure 1), couplings (5), packings (4), valve (3) (main vent assembly), and attaching parts.

3. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings (4, figure 1) with petrolatum and install.
- c. Install valve (3) (main vent assembly), couplings (5), bolts (1), and attaching parts.
- d. Make sure valve (3) moves freely and seats correctly.
- e. Install no. 2 fuel tank access cover (WP005 00).
- f. Connect utility and emergency battery connectors (WP013 00).

4. NO. 3 FUEL TANK DIVE VENT CHECK VALVE.**Support Equipment Required**

None

Materials Required

Nomenclature	Specification or Part Number
Packing (4)	MS29513-230
Petrolatum, Technical	VV-P-236 (CAGE 81348)

5. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove couplings (4, figure 2), packings (2) and tube (1).
- c. Remove couplings (4), packings (2) and valve (3) (main vent assembly).

6. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

- b. Lubricate new packings (2, figure 2) with petrolatum and install.
- c. Install valve (3) (main vent assembly) and couplings (4).
- d. Make sure valve (3) moves freely and seats correctly.
- e. Install tube (1) and coupling (4).
- f. Install no. 3 fuel tank access cover (WP006 00).

7. NO. 4 FUEL TANK DIVE VENT
CHECK VALVE.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (8)	MS29513-230
Packing (2)	MS29513-234
Petrolatum, Technical	VV-P-236 (CAGE 81348)

8. REMOVAL.

- a. Do no. 4 fuel tank aft access cover removal and tank entry procedure (WP008 00) and fuel tank maintenance precautions and general preparation (WP013 00).
- b. On 161353 THRU 162477, do substeps below:
 - (1) Remove bolt (8, figure 3, detail A) and attaching parts.
 - (2) Remove bolt (7), clamps (6 and 10), and attaching parts.
- c. Remove clamps (4) and attaching parts.
- d. Remove coupling (3), packings (2), and valve (1) (manifold assembly).

9. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).
- b. Make sure valve (1, figure 3) moves freely and seats correctly.



Petrolatum 1

- c. Lubricate new packings with petrolatum before installation.
- d. Install packings (2, detail A), coupling (3), and valve (1) (manifold assembly).
- e. On 161353 THRU 162477, do substeps below:
 - (1) Prepare mating surfaces of bracket (9), valve (1), and bolt (8) for electrical bond (A1-F18AC-LMM-000).

- (2) Install bolt (8) and attaching parts.
- (3) Install clamps (6 and 10), bolt (7), and attaching parts.

- f. Install clamps (4) and attaching parts.
- g. Do no. 4 fuel tank aft access cover removal and tank entry procedure (WP008 00).

10. ILLUSTRATED PARTS BREAKDOWN.

11. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

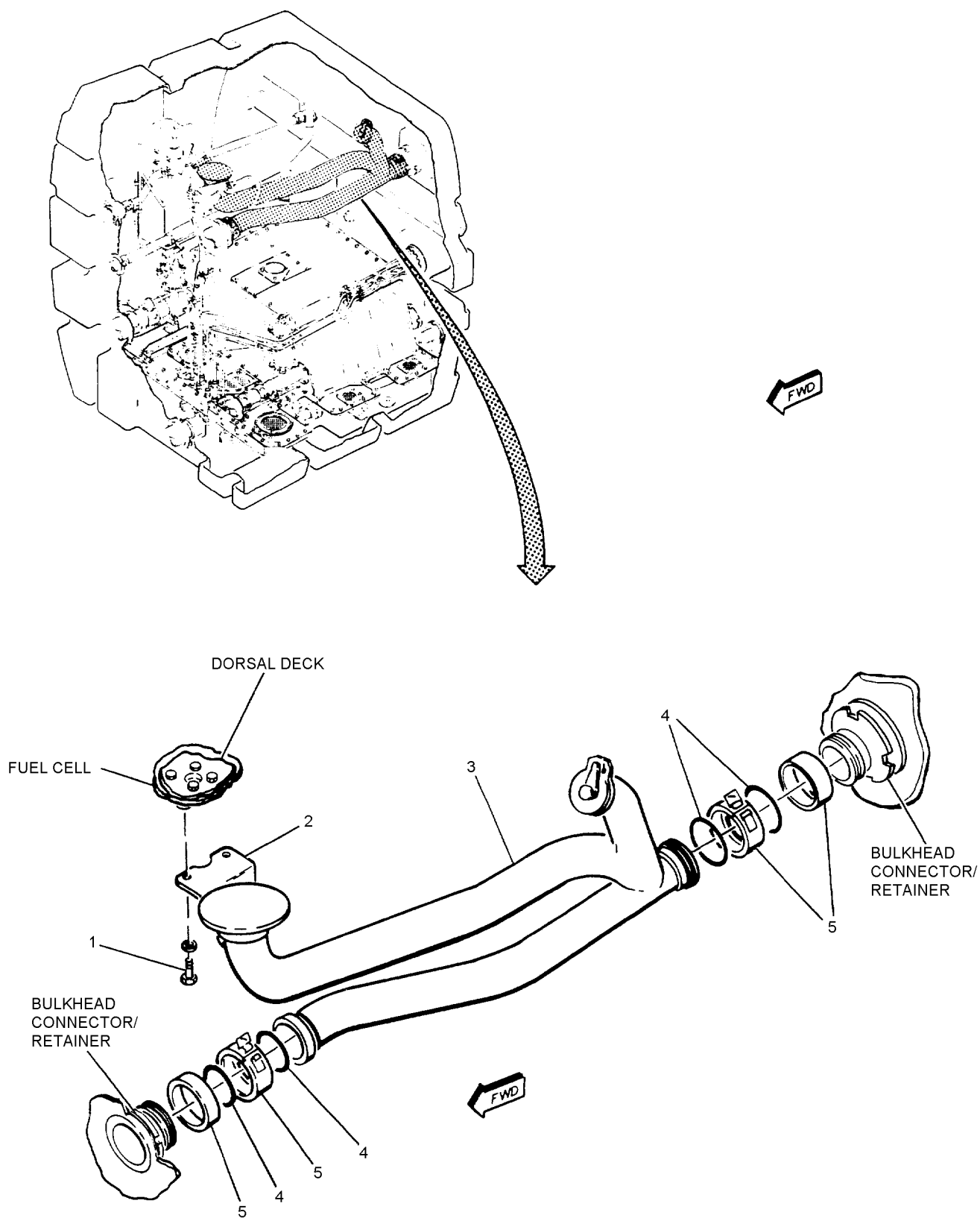


Figure 1. No. 2 Fuel Tank Dive Vent Check Valve (5VAP593) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 2 FUEL TANK DIVE VENT CHECK			
		VALVE (5VAP593)			
1	NAS654V1	. BOLT	2		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 1)	2		PAOZZ
2	74A586244-1017	. SUPPORT ASSEMBLY (76301)	1		XBOGG
	NAS674V3	. BOLT (AP)	1		PAOZZ
	AN960JD416L	. WASHER (AP)	1		PAOZZ
3	74A586259-1011	. VENT ASSEMBLY FUEL TANK NO. 3	1		PAOZZ
		(NO. 2 TANK DIVE VENT CHECK VALVE)			
		(76301) (5VAP593) (REPLACES			
		74A586259-1009, 74A585002-2009 AND			
		74A585002-2001)			
	74A586259-1009	. SEE ABOVE (REPLACED BY 74A586259-1011)	1	*	PAOZZ
	74A585002-2009	. SEE ABOVE (REPLACED BY 74A586259-1011)	1	*	PAOZZ
	74A585002-2001	. SEE ABOVE (REPLACED BY 74A586259-1011)	1	*	PAOZZ
	NAS1802-06-7	. SCREW (USE WITH INDEX 3)	2		PAOZZ
	AN960JD6L	. WASHER (USE WITH INDEX 3)	2		PAOZZ
	NAS1291C06M	. NUT (USE WITH INDEX 3)	4		PAOZZ
	MS21060L4	. NUT PLATE (USE WITH INDEX 3)	1		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
4	MS29513-230	. PACKING	4		PAOZZ
5	W901K40DE	. COUPLING CLAMP GROOVED (79326)	2		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	14J12-40A	. COUPLING CLAMP GROOVED (24984)	2		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	W901F40DE	. COUPLING CLAMP GROOVED (79326)	2	*	PAOZZ
		(MCDONNELL SPEC 7M550-40D)			
		(INCLUDES SLEEVE)			
		* ALTERNATE OR EQUIVALENT PARTS.			
		(WP002 00)			
		# LENGTH/SIZE TO BE DETERMINED AT			
		INSTALLATION.			

Figure 1. No. 2 Fuel Tank Dive Vent Check Valve (5VAP593) (Sheet 2)

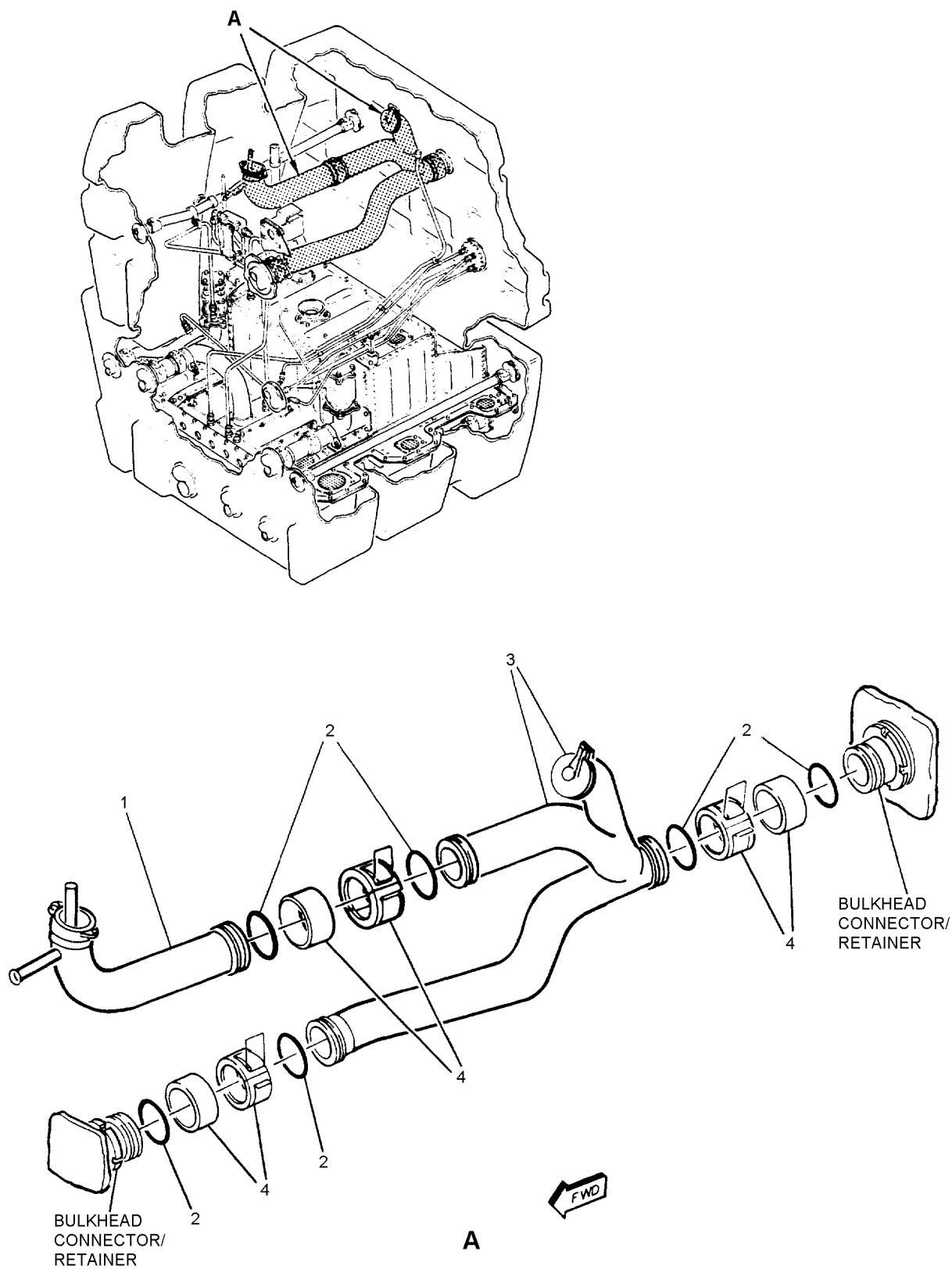


Figure 2. No. 3 Fuel Tank Dive Vent Check Valve (5VAP582) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 3 FUEL TANK DIVE VENT CHECK			
		VALVE (5VAP582)			
1	74A586381-1001	. TUBE ASSY - CLIMB VENT, FUEL TANK	1		XBOOO
		NO. 3 (76301)			
	NS103597-02	. NUT SELF-LOCKING PLATE (80539)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	F10965-1-3	. NUT SELF-LOCKING PLATE (72962)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	F29339-01-3	. NUT SELF-LOCKING PLATE (15653)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	MS20426AD3 #	. RIVET (AP)	4		-
2	MS29513-230	. PACKING	6		PAOZZ
3	74A586321-1011	. VENT ASSEMBLY FUEL TANK NO. 3	1		PAOZZ
		(NO. 3 FUEL TANK DIVE VENT CHECK VALVE) (76301) (5VAP582)			
	74A585003-2001	. MAIN VENT ASSEMBLY (NO. 3 FUEL	1	*	PAOZZ
		TANK DIVE VENT CHECK VALVE) (76301) (5VAP582)			
	NAS1802-06-7	. SCREW (USE WITH INDEX 3)	2		PAOZZ
	AN960JD6L	. WASHER (USE WITH INDEX 3)	4		PAOZZ
	NAS1291C06M	. NUT (USE WITH INDEX 3)	2		PAOZZ
4	W901K40DE	. COUPLING CLAMP GROOVED (79326)	3		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	14J12-40A	. COUPLING CLAMP GROOVED (24984)	3		PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	W901F40DE	. COUPLING, CLAMP GROOVED (79326)	3	*	PAOZZ
		(MCDONNELL SPEC 7M550-40D)			
		(INCLUDES SLEEVE)			

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

Figure 2. No. 3 Fuel Tank Dive Vent Check Valve (5VAP582) (Sheet 1)

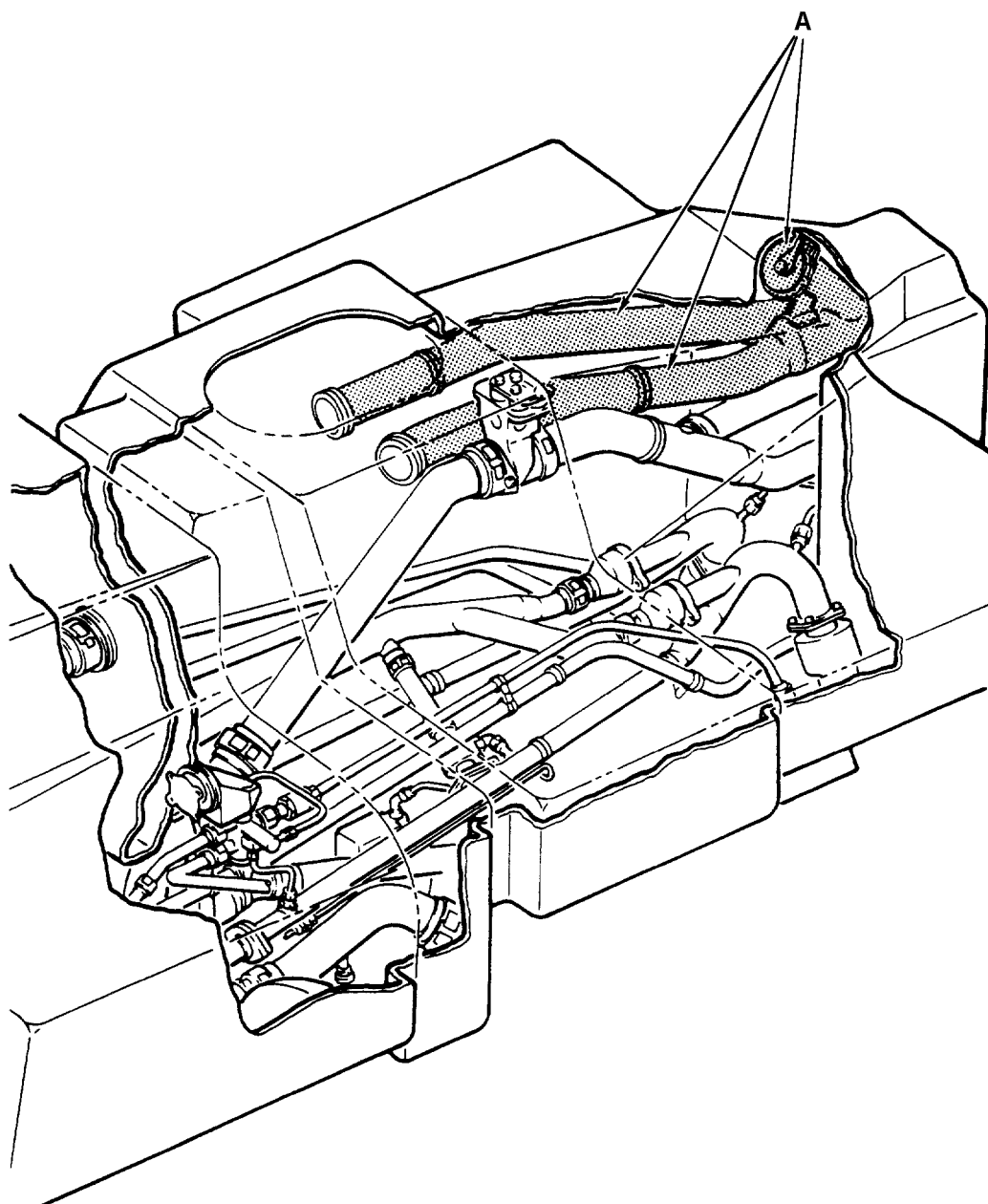


Figure 3. No. 4 Fuel Tank Dive Vent Check Valve (5VAP555) (Sheet 1)

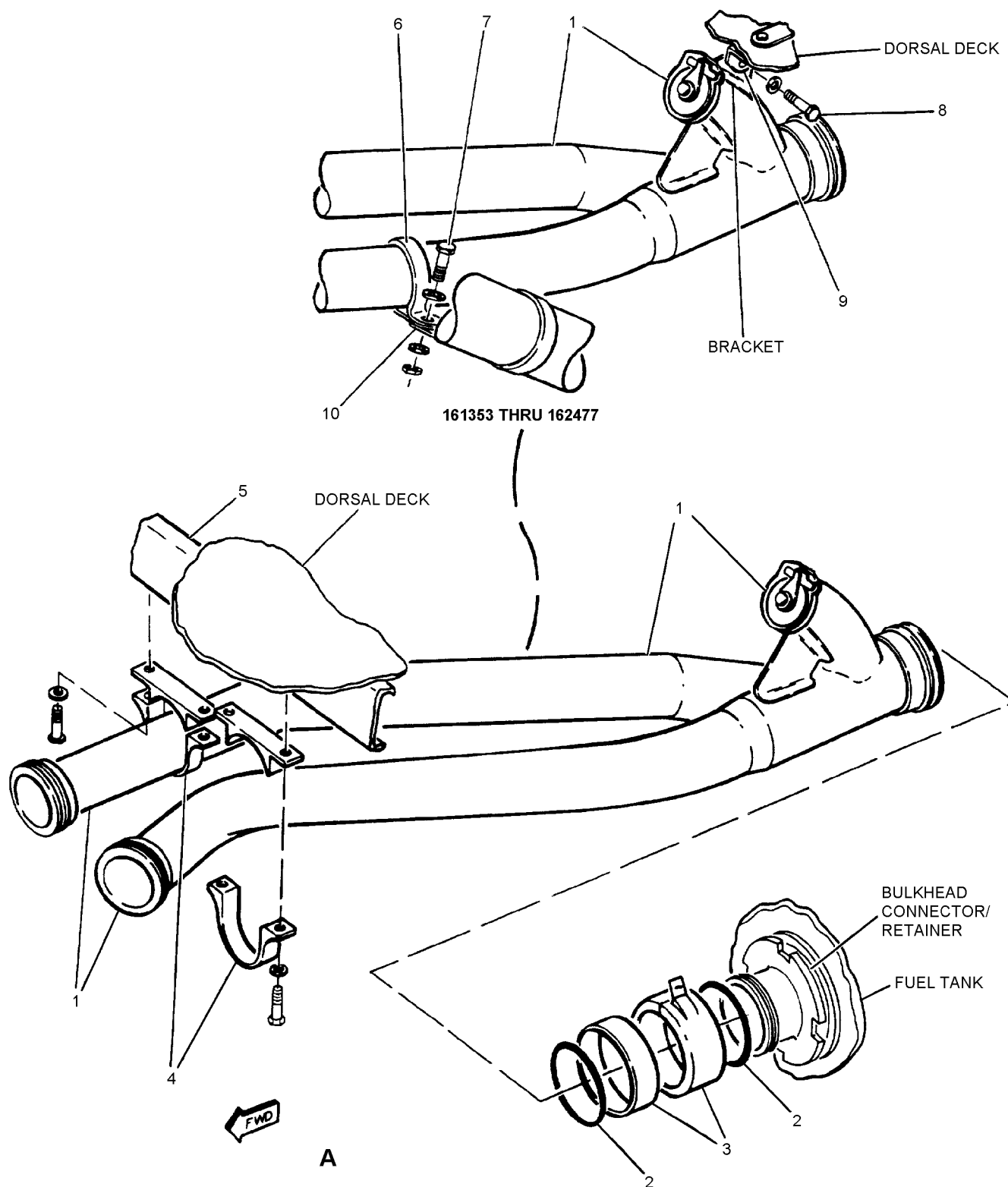


Figure 3. No. 4 Fuel Tank Dive Vent Check Valve (5VAP555) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 4 FUEL TANK DIVE VENT CHECK			
		VALVE (5VAP555)			
1	74A586468-1011	. VENT ASSEMBLY, FUEL TANK NO. 4	1		PAOZZ
		(NO. 4 FUEL TANK DIVE VENT CHECK VALVE) (76301) (5VAP555) (REPLACES 74A586468-1009 AND 74A585004-2003)			
	74A586468-1009	. SEE ABOVE (USE UNTIL EXHAUSTED)	1	*	PAOZZ
	74A585004-2003	. MANIFOLD ASSEMBLY (NO. 4 FUEL TANK DIVE VENT CHECK VALVE) (76301) (5VAP555) (USE UNTIL EXHAUSTED)	1	*	PAOZZ
	NAS1802-06-7	. SCREW (USE WITH INDEX 1)	2		PAOZZ
	AN960JD6L	. WASHER (USE WITH INDEX 1)	2		PAOZZ
	NAS1291C06M	. NUT (USE WITH INDEX 1)	2		PAOZZ
	F29339-01-4	. NUT, SELF-LOCKING, PLATE (15653) (MCDONNELL SPEC ST3M470C4M) (USE WITH INDEX 1)	1	*	PAOZZ
	F10965-1-4	. NUT, SELF-LOCKING, PLATE (72962) (MCDONNELL SPEC ST3M470C4M) (USE WITH INDEX 1)	1	*	PAOZZ
	NS103597-048	. NUT, SELF-LOCKING, PLATE (80539) (MCDONNELL SPEC ST3M470C4M) (USE WITH INDEX 1)	1	*	PAOZZ
	MS20426AD3 #	. RIVET (USE WITH INDEX 1)	2		-
2	MS29513-234	. PACKING	2		PAOZZ
3	W901K48DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M765-48D) (INCLUDES SLEEVE)	1		PAOZZ
	14JI2-48A	. COUPLING, CLAMP, GROOVED (24984) (MCDONNELL SPEC 7M765-48D) (INCLUDES SLEEVE)	1		PAOZZ
	W901F48DE	. COUPLING, CLAMP, GROOVED (79326) (MCDONNELL SPEC 7M550-48D) (INCLUDES SLEEVE)	1	*	PAOZZ
4	NAS1787A40G	. CLAMP	2		PAOZZ
	NAS673V8	. BOLT (AP)			
	AN960JD10L	. WASHER (AP)	2		PAOZZ
5	74A586429-1039	. SUPPORT (76301)	1		XBOOO
	MS21062L3	. NUT, PLATE (USE WITH INDEX 5)	6		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
6	NAS1715D40K	. CLAMP	1	A	PAOZZ
7	NAS673V3	. BOLT	1	A	PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 7)	2		PAOZZ
	NAS1291C3M	. NUT (USE WITH INDEX 7)	1		
8	NAS674V2	. BOLT	1		PAOZZ
	AN960JD416L	. WASHER (USE WITH INDEX 8)	1		PAOZZ
9	74A586429-2073	. BRACE (76301)	1	A	XBOZZ
10	74A586429-2115	. CLAMP (76301)	2	A	XBOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

Figure 3. No. 4 Fuel Tank Dive Vent Check Valve (5VAP555) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

CODE	USABLE ON	MODEL
A	161353 THRU 162477	F/A-18A/B

Figure 3. No. 4 Fuel Tank Dive Vent Check Valve (5VAP555) (Sheet 4)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

FUEL TANK INVERTED FLIGHT VENT CHECK VALVE (5VAR677 OR 5VAR678)

FUEL PRESSURIZATION AND VENT SYSTEM

EFFECTIVITY: 161716 AND UP; ALSO 161353 THRU 161715 AFTER
F/A-18 AFC 18 AND F/A-18 AFC 53

Reference Material

Fuel System	A1-F18AC-460-300
No. 2 Fuel Tank Access Cover	WP005 00
No. 3 Fuel Tank Access Cover	WP006 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 18	-	Incorporation of Fuel Turbine Boost Pump/ Sealing of Raised Baffle in Fuel Tanks 2 and 3 (ECP MDA-F/A-18-00077C1/C2)	15 Jul 86	-
F/A-18 AFC 53	-	Elimination of Tanks 1 and 4 Sneak Circuit, Tank 4 Motive Flow Shut Off Valve, and Raised Inverted Baffle (ECP MDA-F/ A-18-00055C1)	15 Jul 86	-

1. NO. 2 FUEL TANK INVERTED FLIGHT VENT CHECK VALVE.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (2)	MS29513-214
Petrolatum, Technical	VV-P-236 (CAGE 81348)

2. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove cover (1, figure 1) and attaching parts.
- c. Remove coupling (4, detail A), packings (3), and rotate tube (2) to clear connector (6).
- d. Remove screws (5), connector (6), restrictor (7), check valve (8), and attaching parts.

3. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).
- b. Prepare mating surfaces of connector (6, figure 1, detail A) and baffle for electrical bonding (A1-F18AC-LMM-000).
- c. Install check valve (8), restrictor (7), connector (6), screws (5), and attaching parts.
- d. Inspect check valve (8) for freedom of movement and correct seating.



Petrolatum

1

- e. Lubricate new packings with petrolatum.
- f. Install packings (3).

- g. Rotate tube (2) into position above connector (6) and install coupling (4).

- h. Install cover (1, figure 1) and attaching parts.

- i. Install no. 2 fuel tank access cover (WP005 00).

- j. Connect utility and emergency battery connectors (WP013 00).

4. NO. 3 FUEL TANK INVERTED FLIGHT VENT CHECK VALVE.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (2)	MS29513-214
Packing (6)	MS29513-226
Packing (6)	MS29513-230
Petrolatum, Technical	VV-P-236 (CAGE 81348)

5. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove coupling (3, figure 2, detail A), packings (2), and tube (1).
- c. Remove couplings (3), packings (2), and main vent assembly (4).
- d. Remove probe guide (11, detail B), bolts (12, 13, and 14), shim (15), and attaching parts.
- e. Disconnect tube (10, detail C) and rotate away from work area.
- f. Remove coupling (7), packings (6), and rotate tube (5) away from work area.
- g. Remove tube (27, detail D).
- h. Remove couplings (17), packings (16), and tube (18).
- i. Disconnect manifold (19) and clamp (29, detail F).

j. Remove coupling (23, detail D), clamp (20), and manifold (19) with attaching parts.

k. Carefully remove panel (30, detail E) with defuel valve attached.

l. Remove panel (31) and attaching parts.

m. Remove screws (32), check valve (33), restrictor (34), and attaching parts.

6. INSTALLATION.

a. Do general preparation for component installation (WP013 00).



Petrolatum

1

b. Lubricate new packings with petrolatum.

c. Prepare mating surfaces of connector (8, figure 2, detail E) and baffle panel assy for electrical bonding (A1-F18AC-LMM-000).

d. Install check valve (33), restrictor (34), connector (8), bolts (32), and attaching parts.

e. Inspect check valve (33) for correct seating and freedom of movement.

f. Install panel (31) and attaching parts.

g. Inspect for and remove any foreign objects from below baffle area. (QA)

h. Carefully position panel (30) with defuel valve attached and install attaching parts.

i. Prepare mating surfaces of manifold (19, detail D), attaching parts, and baffle for electrical bond (A1-F18AC-LMM-000).

j. Position manifold (19) and install packings (16), coupling (23), clamp (20), and attaching parts.

k. Connect manifold (19), and connect clamp (29, detail F) to bracket (28) with attaching parts.

l. Position tube (18, detail D) and install packings (16) and couplings (17).

m. Install tube (27).

n. Position tube (18) and install coupling (7, detail C) and packings (6).

o. Connect tube (10).

p. Install probe guide (11, detail B), shim (15), bolts (12, 13, and 14), and attaching parts.

q. Install packings (2, detail A), coupling (3), and main vent assembly (4).

r. Install packing (2), coupling (3), and tube (1).

s. Install access no. 3 fuel tank cover (WP006 00).

t. Connect both utility and emergency battery connectors (WP013 00).

7. ILLUSTRATED PARTS BREAKDOWN.

8. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

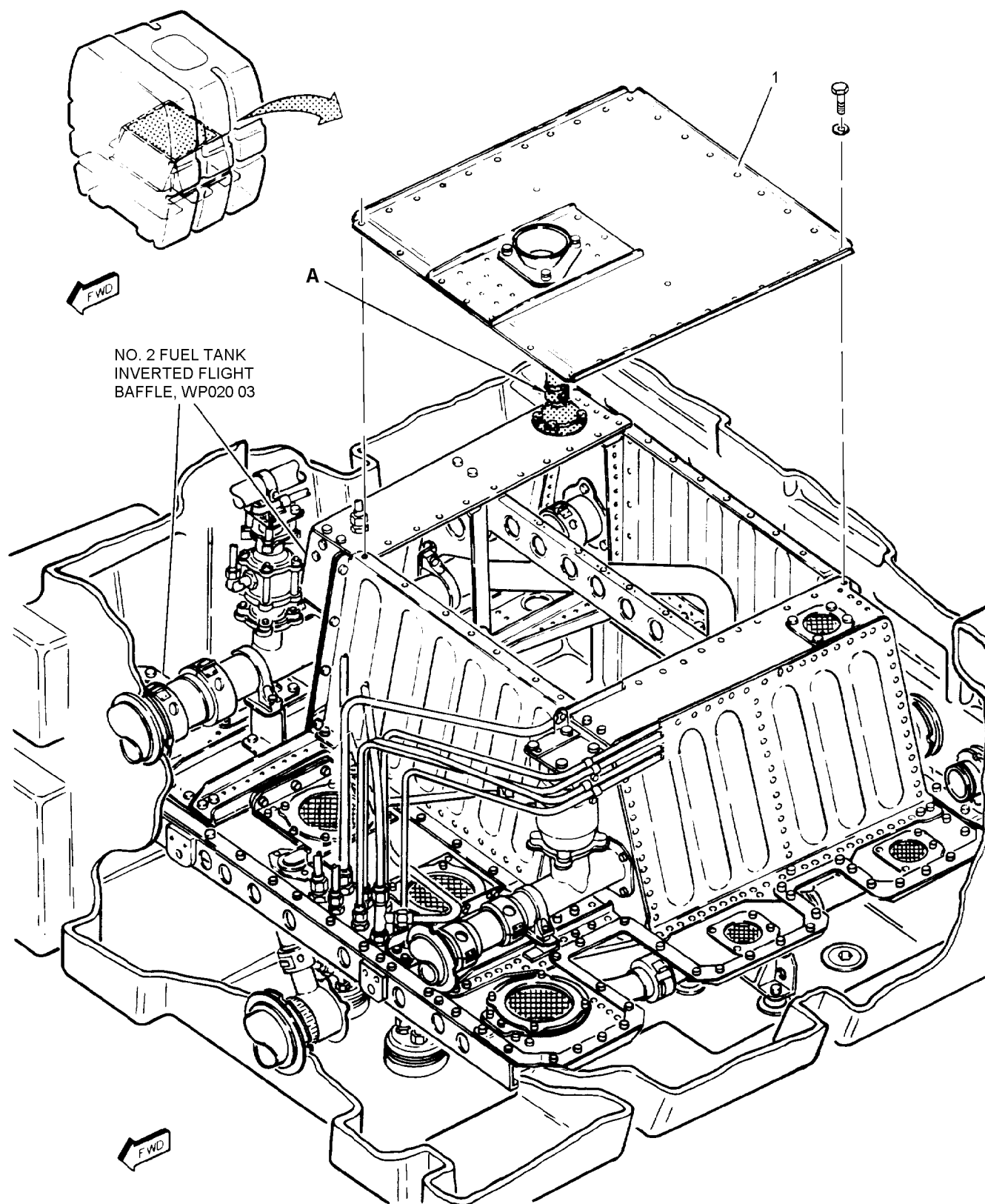


Figure 1. No. 2 Fuel Tank Inverted Flight Vent Check Valve (5VAR677) (Sheet 1)

1560101A

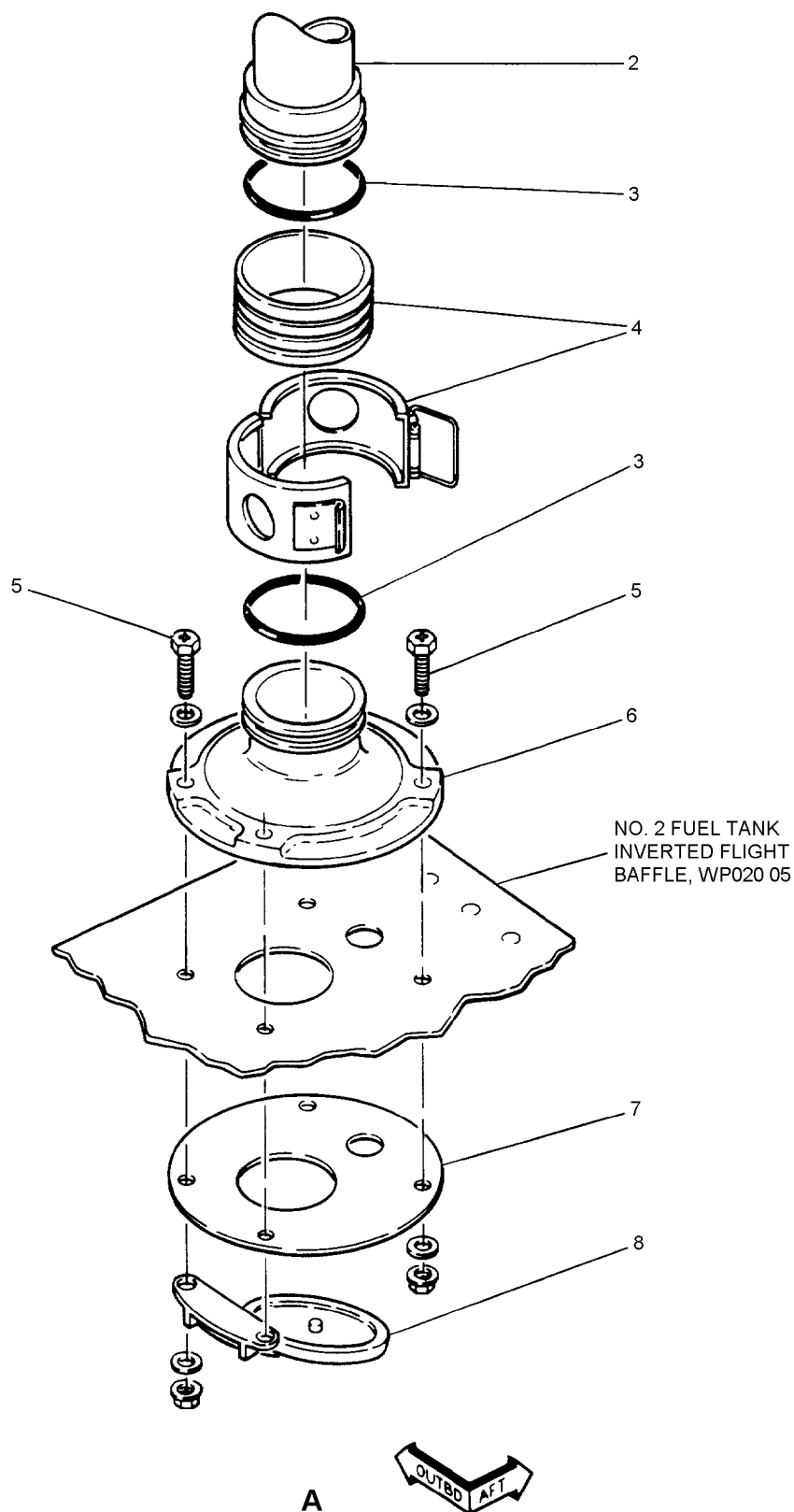


Figure 1. No. 2 Fuel Tank Inverted Flight Vent Check Valve (5VAR677) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 2 FUEL TANK INVERTED FLIGHT			
		VENT CHECK VALVE (5VAR677)			
1	74A586247-1029	. COVER ASSY (76301) (FOR REPAIR	1	A	XBOOO
		SEE WP020 05)			
	74A586247-1049	. COVER ASSY (76301) (FOR REPAIR	1	B	XBOOO
		SEE WP020 05)			
	NAS673V4	. BOLT (AP)	AR		PAOZZ
	AN960JD10L	. WASHER (AP)	AR		PAOZZ
2	74A586252-1007	. TUBE ASSEMBLY METAL - VENT	1		MGOZZ
		INVERTED FLT COMPT TANK 2 (76301)			
3	MS29513-214	. PACKING	2		PAOZZ
4	W901K16DE	. COUPLING CLAMP GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE)			
	14J12-16A	. SEE ABOVE (24984)	1	*	PAOZZ
5	NAS1802-06-9	. SCREW	4		PAOZZ
	AN960JD6L	. WASHER (USE WITH INDEX 5)	8		PAOZZ
	NAS1291C06M	. NUT (USE WITH INDEX 5)	4		PAOZZ
6	74A586248-2007	. CONNECTOR FLANGE (76301)	1		XBOZZ
7	74A586248-2013	. RESTRICTOR (76301) (SUPERSEDES	1		XBOZZ
		74A586248-2009			
8	55-6004	. DISK ASSEMBLY VALVE CHECK	1		PAOZZ
		FUEL SYSTEM GRAVITY FEED NO. 2			
		FUEL TANK INVERTED FLIGHT VENT			
		CHECK VALVE) (96736) (MCDONNELL			
		SPEC 74-588006-109) (5VAR677)			

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00).

CODE	USABLE ON	MODEL
A	161716 THRU 161761	F/A-18A/B
B	161924 & UP ALSO 161353 THRU 161715 AFTER F/A-18 AFC 53	F/A-18A/B

Figure 1. No. 2 Fuel Tank Inverted Flight Vent Check Valve (5VAR677) (Sheet 3)

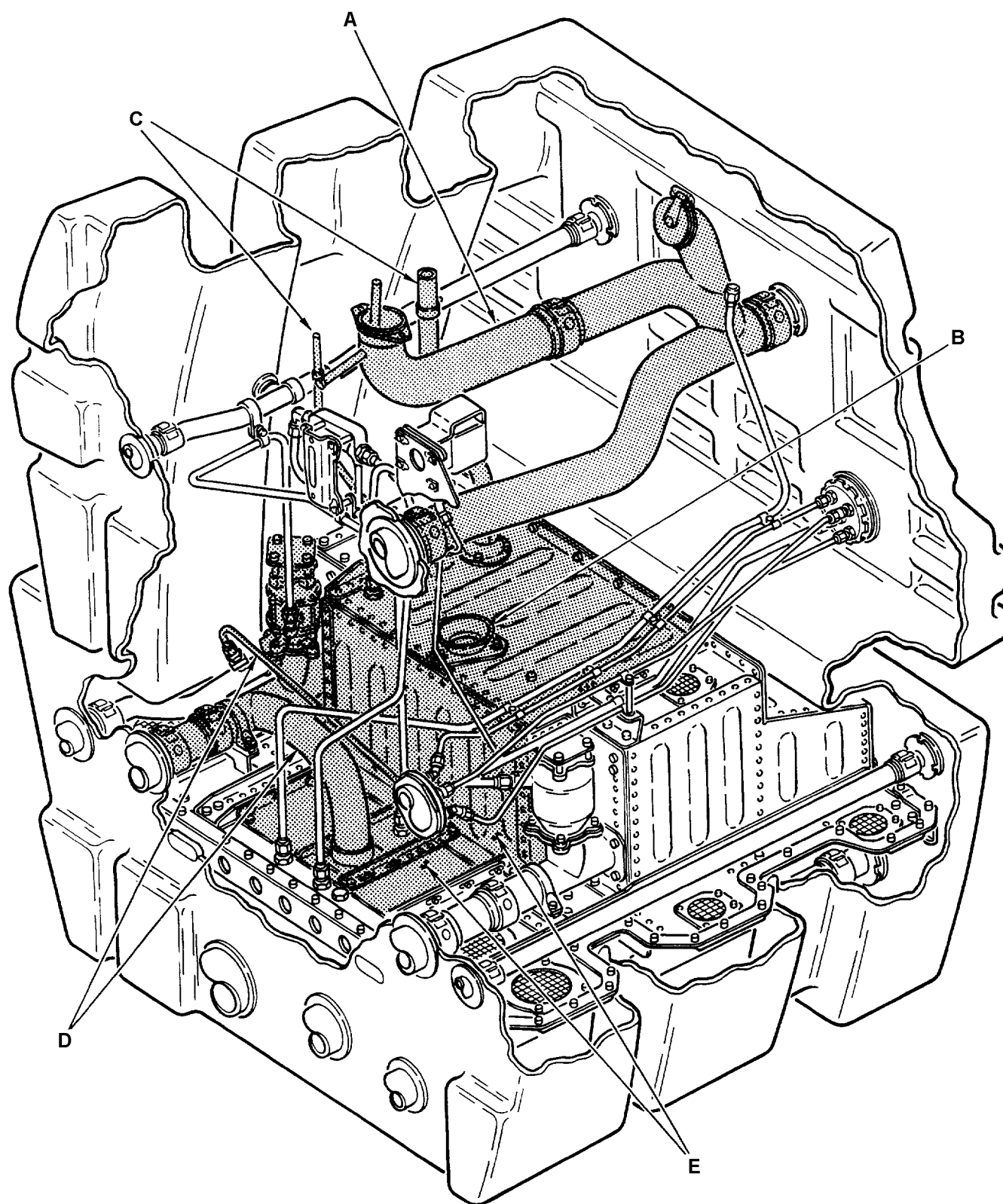


Figure 2. No. 3 Fuel Tank Inverted Flight Vent Check Valve (5VAR678) (Sheet 1)

1560102A

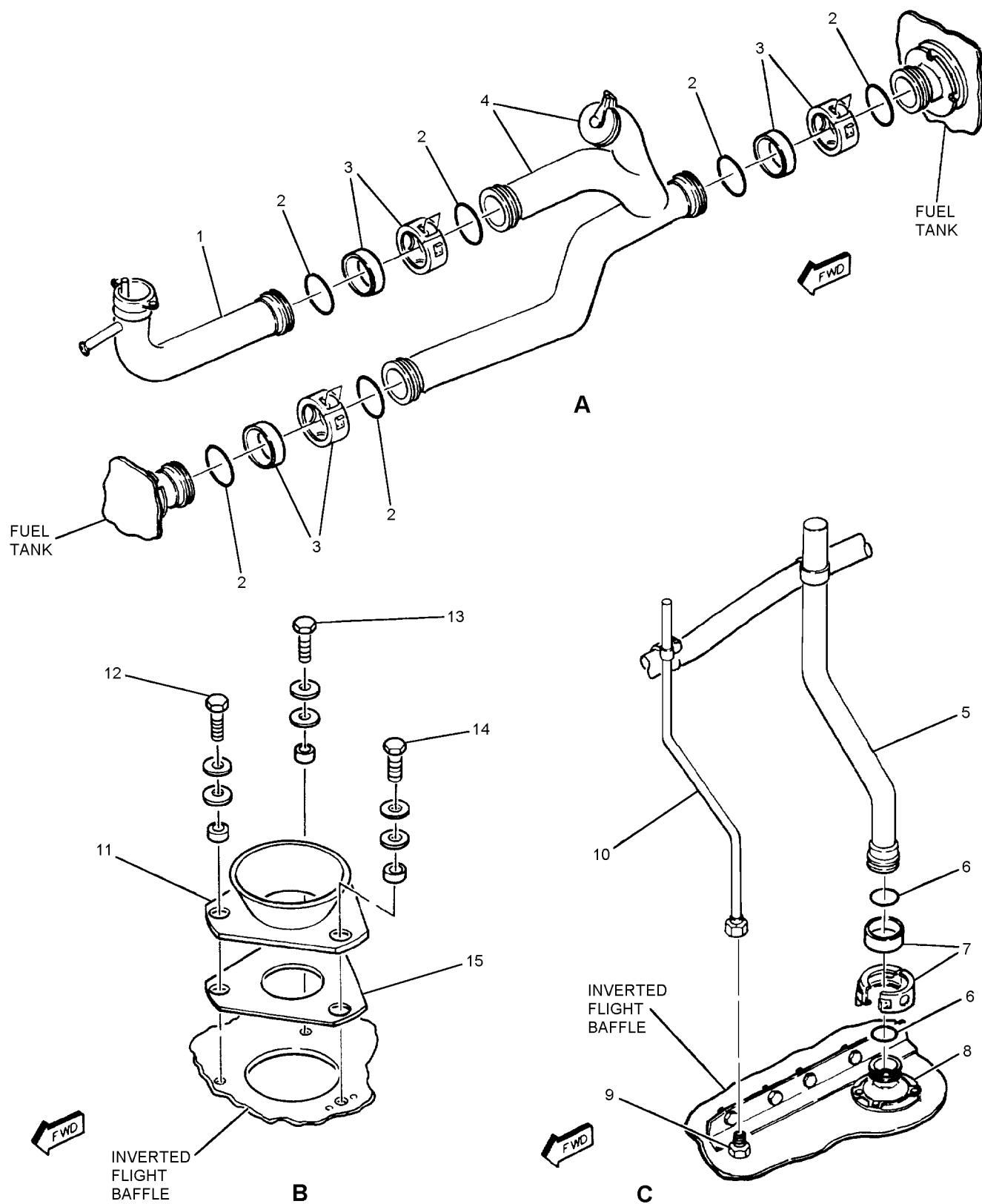


Figure 2. No. 3 Fuel Tank Inverted Flight Vent Check Valve (5VAR678) (Sheet 2)

1560102B

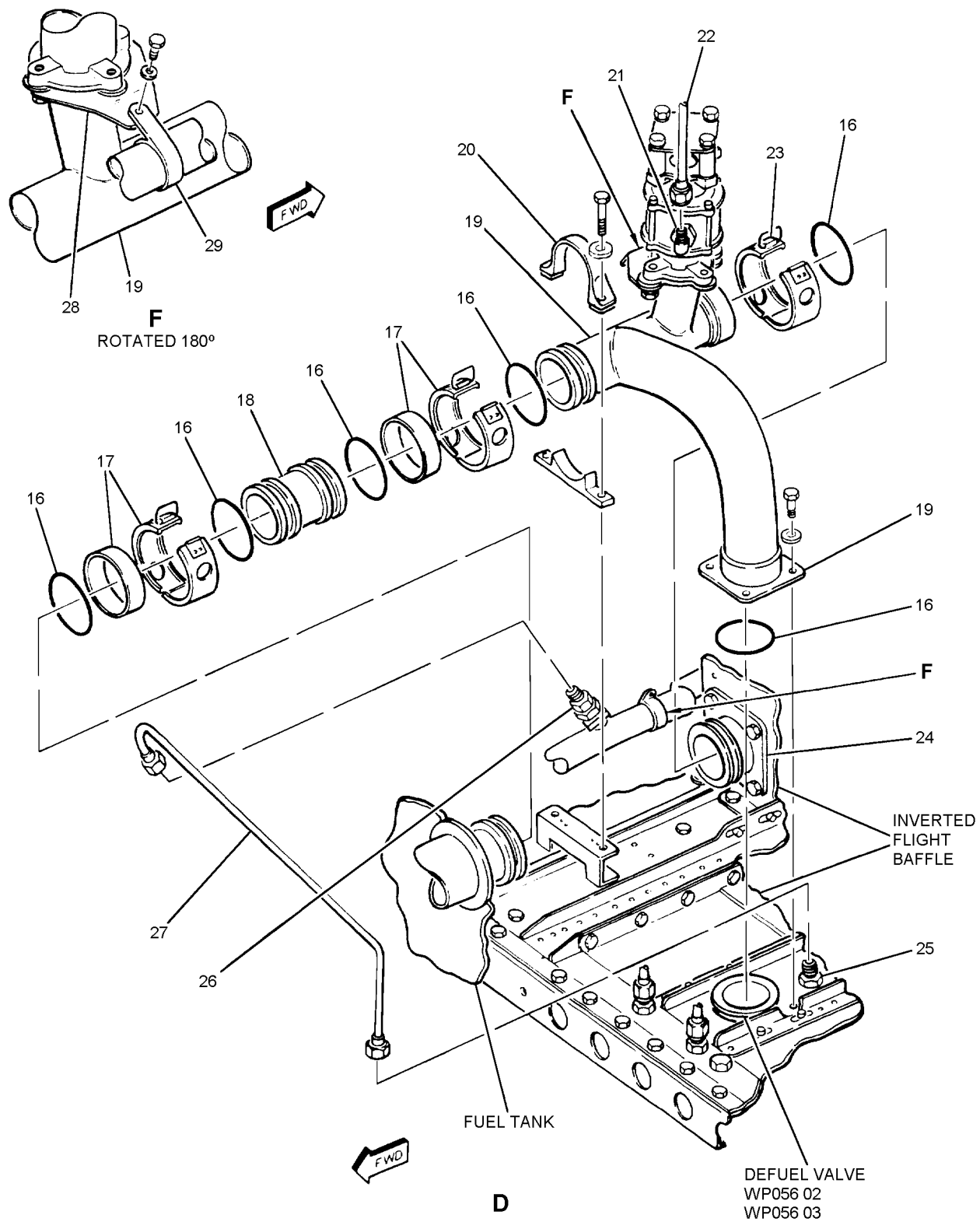


Figure 2. No. 3 Fuel Tank Inverted Flight Vent Check Valve (5VAR678) (Sheet 3)

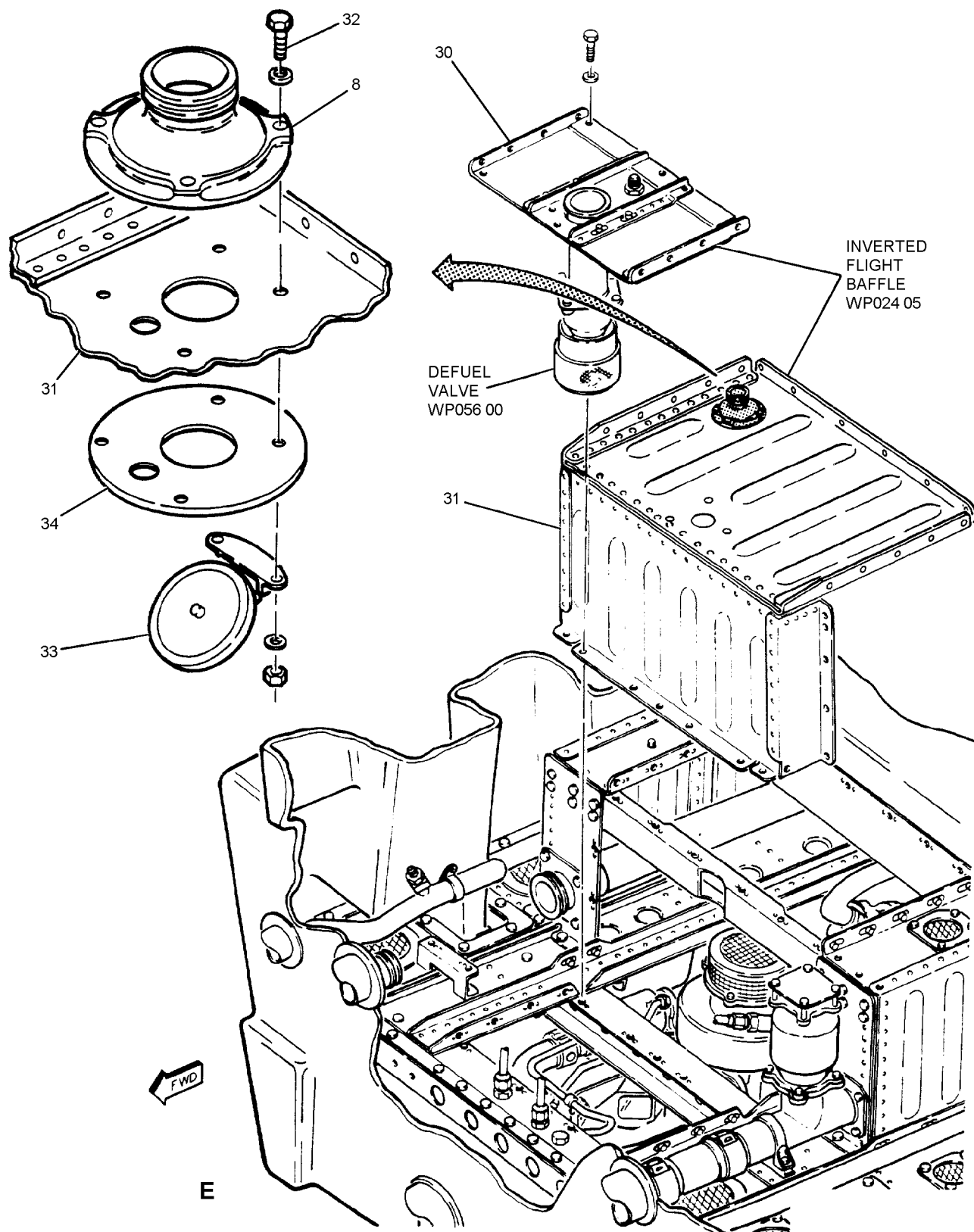


Figure 2. No. 3 Fuel Tank Inverted Flight Vent Check Valve (5VAR678) (Sheet 4)

1560102D

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 3 FUEL TANK INVERTED FLIGHT			
		VENT CHECK VALVE (5VAR678)			
1	74A586381-1001	. TUBE ASSY - CLIMB VENT FUEL	1		XBOOO
		TANK NO. 3 (76301)			
	NS103597-02	. NUT SELF-LOCKING, PLATE (80539)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	F10965-1-3	. NUT SELF-LOCKING PLATE (72962)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	F29339-01-3	. NUT, SELF-LOCKING, PLATE (15653)	2	*	PAOZZ
		(MCDONNELL SPEC ST3M470C3M)			
		(USE WITH INDEX 1)			
	MS20426AD3 #	. RIVET (AP)	2		-
2	MS29513-230	. PACKING	6		PAOZZ
3	W901K40DE	. COUPLING, CLAMP GROOVED (79326)	3	*	PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
	14J12-40A	. COUPLING CLAMP, GROOVED (24984)	3	*	PAOZZ
		(MCDONNELL SPEC 7M765-40D)			
		(INCLUDES SLEEVE)			
4	74A586321-1011	. VENT ASSEMBLY, FUEL TANK NO. 3	1		PAOZZ
		(NO. 3 FUEL TANK DIVE VENT CHECK VALVE) (76301) (5VAP582)			
	74A585003-2001	. SEE ABOVE	1	*	PAOZZ
	NAS1802-06-7	. SCREW (USE WITH INDEX 4)	2		PAOZZ
	AN960JD6L	. WASHER (USE WITH INDEX 4)	2		PAOZZ
	NAS1291C06M	. NUT (USE WITH INDEX 4)	2		PAOZZ
5	74A586314-1005	. TUBE ASSEMBLY METAL - VENT AFT	1		XBOZZ
		INVERTED FLT COMPT, TK 3 (76301)			
6	MS29513-214	. PACKING	2		PAOZZ
7	W901K16DE	. COUPLING CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE)			
	14J12-16A	. COUPLING, CLAMP, GROOVED (24984)	1		PAOZZ
		(MCDONNELL SPEC 7M765-16D)			
		(INCLUDES SLEEVE)			
	W901F16DE	. COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M550-16D)			
		(INCLUDES SLEEVE)			
8	74A586248-2007	. CONNECTOR FLANGE (FITTING) (76301)	1		XBOZZ
9	7M637BT-6D	. NIPPLE TUBE (76301)	1	C	PAOZZ
10	74A586313-1005	. TUBE ASSEMBLY, METAL - VENT FWD,	1	C	MGOZZ
		INVERTED FLT COMPT TK 3 (76301)			
11	74A586297-2001	. GUIDE PROBE - FUEL QTY TANK 2 & 3	1		XBOZZ
		(76301)			
12	NAS673V4	. BOLT	1	C	PAOZZ
	NAS673V6	. BOLT	1	D	PAOZZ
	4M36-01016	. WASHER, FLAT (76301)	2		PAOZZ
		(USE WITH INDEX 12)			
	NAS43DD3-8	. SPACER (USE WITH INDEX 12)	1	C	PAOZZ
	NAS43DD3-11	. SPACER (USE WITH INDEX 12)	1	D	PAOZZ

Figure 2. No. 3 Fuel Tank Inverted Flight Vent Check Valve (5VAR678) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
13	NAS673V4	.	BOLT	.....					1	C	PAOZZ
	NAS673V5	.	BOLT	.....					1	D	PAOZZ
	4M36-01016	.	WASHER FLAT (76301)	.....					2		PAOZZ
			(USE WITH INDEX 13)								
	NAS43DD3-8	.	SPACER (USE WITH INDEX 13)	.....					1	C	PAOZZ
	NAS43DD3-11	.	SPACER (USE WITH INDEX 13)	.....					1	D	PAOZZ
14	NAS673V4	.	BOLT	.....					1	C	PAOZZ
	NAS673V7	.	BOLT	.....					1	D	PAOZZ
	4M36-01016	.	WASHER FLAT (76301)	.....					2		PAOZZ
			(USE WITH INDEX 14)								
	NAS43DD3-8	.	SPACER (USE WITH INDEX 14)	.....					1	C	PAOZZ
	NAS43DD3-11	.	SPACER (USE WITH INDEX 14)	.....					1	D	PAOZZ
15	74A586556-2001	.	GASKET (76301)	.....					1	D	MDOZZ
16	MS29513-226	.	PACKING	.....					6		PAOZZ
17	W901K32DE	.	COUPLING CLAMP GROOVED (79326)	.....					2		PAOZZ
			(MCDONNELL SPEC 7M765-32D)								
			(INCLUDES SLEEVE)								
	14J12-32A	.	COUPLING CLAMP GROOVED (24984)	.....					2		PAOZZ
			(MCDONNELL SPEC 7M765-32D)								
			(INCLUDES SLEEVE)								
	W901F32DE	.	COUPLING CLAMP GROOVED (79326)	.....					2	*	PAOZZ
			(MCDONNELL SPEC 7M550-32D)								
			(INCLUDES SLEEVE)								
18	74A586216-1005	.	TUBE ASSEMBLY METAL - REFUEL	.....					1		XBOZZ
			TANK NO. 2 (76301)								
19	74A586317-1005	.	MANIFOLD FUEL AIRCRAFT - FUEL	.....					1		XBOZZ
			TANK NO. 3 (76301) (SUPERSEDES								
			74A586317-1001)								
	NAS673V2	.	BOLT (AP)	.....					4		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					4		PAOZZ
20	NAS1787A32G	.	CLAMP	.....					1		PAOZZ
	NAS673V9	.	BOLT (AP)	.....					2		PAOZZ
	AN960JD10L	.	WASHER (AP)	.....					2		PAOZZ
21	7M637BW-6D	.	ELBOW TUBE (76301)	.....					1		XBOZZ
22	74A586341-1015	.	TUBE ASSEMBLY METAL - PILOT VALVE	.....					1		MGOZZ
			RH PORT TO REFUEL V (76301)								
			(SUPERSEDES 74A586341-1007 AND								
			74A586341-1011)								
23	W904K32DE	.	COUPLING CLAMP GROOVED (HALF)	.....					1		PAOZZ
			(79326) (MCDONNELL SPEC 7M765-32D1)								
	14C12-32A	.	COUPLING CLAMP GROOVED (HALF)	.....					1		PAOZZ
			(24984) (MCDONNELL SPEC 7M765-32D1)								
	W904F32DE	.	COUPLING CLAMP GROOVED (HALF)	.....					1	*	PAOZZ
			(79326) (MCDONNELL SPEC 7M550-32D1)								
24	74A586248-2001	.	CONNECTOR FLANGE (PITTING) (76301)	.....					1		XBOZZ
	NAS674V3	.	BOLT (AP)	.....					4		PAOZZ
	AN960JD416L	.	WASHER (AP)	.....					4		PAOZZ
25	7M637BT-6D	.	NIPPLE, TUBE (76301)	.....					1	A	PAOZZ
	7M637BY-6D	.	ELBOW, TUBE (76301)	.....					1	B	PAOZZ
26	7M637BD-6D	.	NIPPLE, TUBE (76301)	.....					1		PAOZZ
27	74A586669-1017	.	TUBE ASSEMBLY METAL - PRESS	.....					1		MGOZZ
			SENSOR TO DEFUEL LINE TK 3								
			(76301) (SUPERSEDES 74A586669-1013)								

Figure 2. No. 3 Fuel Tank Inverted Flight Vent Check Valve (5VAR678) (Sheet 6)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
28	74A586323-1035	.	BRACKET ASSY (76301)						1		XBOZZ
	MS21060L3	.	NUT PLATE (USE WITH INDEX 28)						1		PAOZZ
	NAS1079AD3 #	.	RIVET (AP)						2		-
29	MS25281-R20	.	CLAMP						1		PAOZZ
	NAS673V3	.	BOLT (AP)						1		PAOZZ
	AN960JD10L	.	WASHER (AP)						1		PAOZZ
30	74A586315-2013	.	PANEL ASSY FRONT (76301) (FOR REPAIR						1		XBOOO
			SEE WP024 05)								
	NAS673V4	.	BOLT (AP)						AR		PAOZZ
	AN960JD10L	.	WASHER (AP)						AR		PAOZZ
31	74A586315-2011	.	PANEL ASSY CENTER (76301) (FOR REPAIR						1	C	XBOOO
			SEE WP024 05)								
	74A586315-2015	.	PANEL ASSY CENTER (76301) (FOR REPAIR						1	D	XBOOO
			SEE WP024 05)								
	NAS673V4	.	BOLT (AP)						AR		PAOZZ
	AN960JD10L	.	WASHER (AP)						AR		PAOZZ
32	NAS1802-06-9	.	SCREW						4		PAOZZ
	AN960JD6L	.	WASHER (USE WITH INDEX 32)						8		PAOZZ
	NAS1291C06M	.	NUT (USE WITH INDEX 32)						4		PAOZZ
33	55-6004	.	DISK ASSEMBLY VALVE CHECK FUEL						1		PAOZZ
			SYSTEM GRAVITY FEED (NO. 3 FUEL								
			TANK INVERTED FLIGHT CHECK								
			VALVE) (96736) (MCDONNELL SPEC								
			74-588006-109) (5VAR678)								
34	74A586248-2013	.	RESTRICTOR (76301) (SUPERSEDES						1		XBOZZ
			74A586248-2009)								

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

CODE	USABLE ON	MODEL
A	161716 THRU 161720	F/A-18A/B
B	161721 & UP; ALSO 161353 THRU 161715 AFTER F/A-18 AFC 53	F/A-18A/B
C	161716 THRU 161761	F/A-18A/B
D	161924 & UP; ALSO 161353 THRU 161715 AFTER F/A-18 AFC 53	F/A-18A/B

Figure 2. No. 3 Fuel Tank Inverted Flight Vent Check Valve (5VAR678) (Sheet 7)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
SIPHON BREAKER CHECK VALVE (5VAS545)
FUEL PRESSURIZATION AND VENT SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Vent Tank Access Cover	WP009 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00

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Removal	1

Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Packing (2)	MS29513-234
Packing	MS29513-338
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. On 161924 AND UP, remove clamps (9 and 10, figure 1) and attaching parts.
- c. Disconnect coupling (11) and remove coupling (14), packings (13 and 15), and tube (8).
- d. Remove bolts (3), nuts, washers (2), and plate (1) with valve (6).
- e. Remove screws (5), washers (4), nuts (7), and valve (6) from plate (1).

2. INSTALLATION.

- a. Do general preparation for component installation (WP013 00).



Petrolatum

1

b. Lubricate new packings (13 and 15, figure 1), with petrolatum.

c. Install valve (6) on plate (1) with screws (5), washers (4), and nuts (7).

d. Install plate (1) with valve (6), bolts (3), nuts, and washers (2).

e. Install packing (13) on tube (8).

f. Install packings (15), tube (8), and coupling (14).

g. Connect coupling (11) to tube (12).

h. On 161924 AND UP, install clamps (9 and 10) and attaching parts.

i. Install vent tank access cover (WP009 00).

j. Connect utility and emergency battery connectors (WP013 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

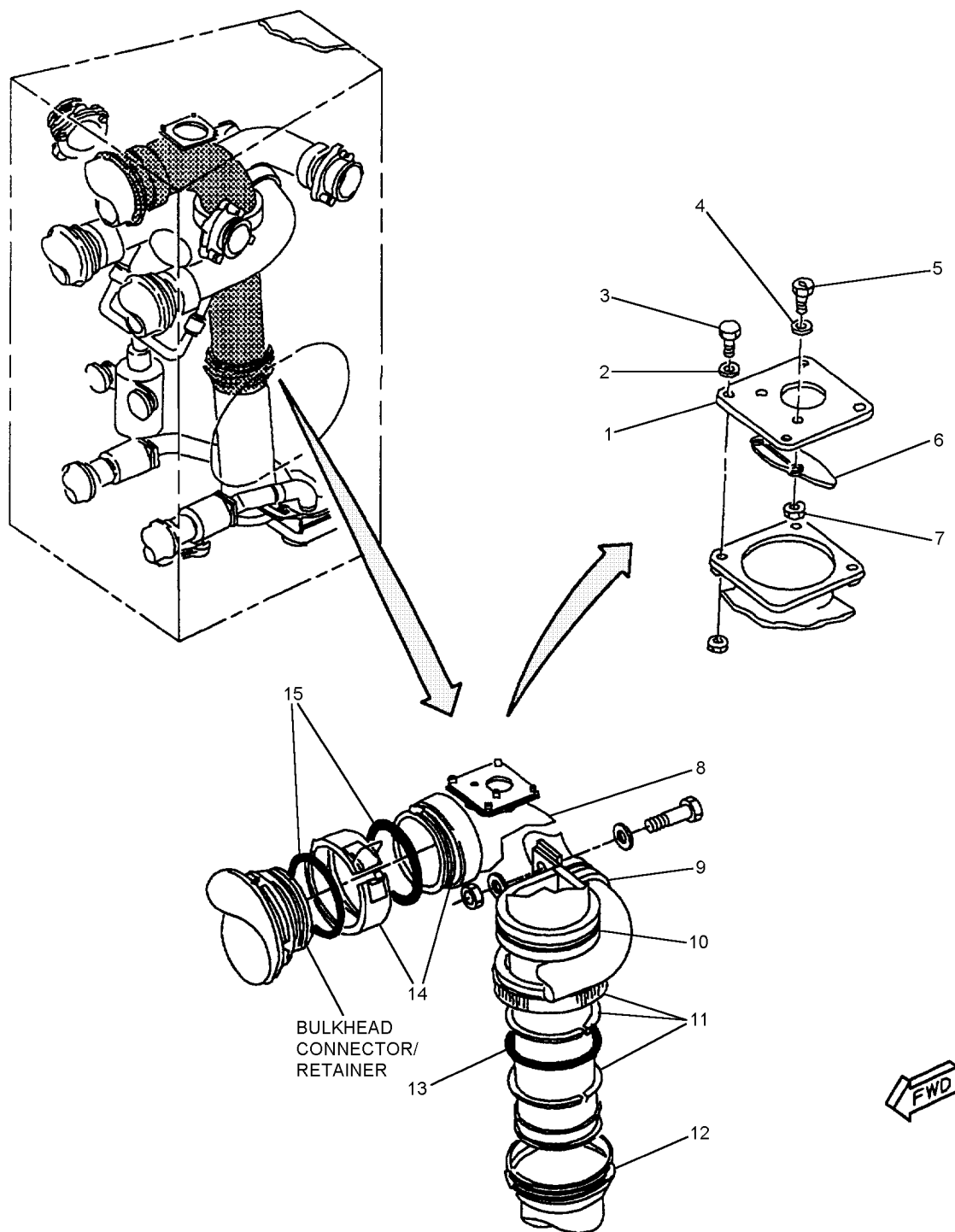


Figure 1. Siphon Breaker Check Valve (5VAS545) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		SIPHON BREAKER CHECK VALVE (5VAS545)			
1	74A586505-2007	. PLATE - FUEL LINE, VENT TANK (76301)	1		XBOZZ
2	AN960JD10L	. WASHER	4		PAOZZ
3	NAS673V1	. BOLT	4		PAOZZ
	NAS1291C3M	. NUT (USE WITH INDEX 3)	4		PAOZZ
4	AN960JD6L	. WASHER	2		PAOZZ
5	NAS1802-06-6	. SCREW	2		XBOZZ
6	55-6004	. DISK ASSEMBLY, VALVE, CHECK, FUEL	1	*	PAOZZ
		SYSTEM, GRAVITY FEED (SIPHON BREAKER CHECK VALVE) (96736) (MCDONNELL SPEC 74J588006-109) (5VAS545)			
	20C112-109	. SEE ABOVE (82829)	1	*	PAOZZ
7	NAS1291C6M	. NUT	2		PAOZZ
8	74A586514-1001	. TUBE ASSEMBLY, METAL - FUEL VENT	1		XBOZZ
		TANK (76301)			
9	MS21919WDF32	. CLAMP	1	A	PAOZZ
	NAS673V4	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
	NAS1291C3M	. NUT (AP)	1		PAOZZ
10	MS21919WDF48	. CLAMP	1	A	PAOZZ
11	W702-48D	. NUT ASSEMBLY, TUBE COUPLING (79326)	1	*	PAOZZ
		(MCDONNELL SPEC ST7M191-48D) (INCLUDES NUT AND 2 WASHERS)			
	12H72-48D	. SEE ABOVE (24984)	1	*	PAOZZ
12	74A586515-1001	. TUBE ASSEMBLY, METAL - VENT LINE,	1		XBOOO
		LOWER VENT TANK (76301)			
	MS21060-3	. NUT, PLATE (USE WITH INDEX 12)	2		PAOZZ
	MS20426AD3 #	. RIVET (AP)	2		-
13	MS29513-338	. PACKING	1		PAOZZ
14	W901K48DE	. COUPLING, CLAMP, GROOVED (79326)	1		PAOZZ
		(MCDONNELL SPEC 7M765-48D) (INCLUDES SLEEVE)			
	14J12-48A	. COUPLING, CLAMP, GROOVED (24984)	1		PAOZZ
		(MCDONNELL SPEC 7M765-48D) (INCLUDES SLEEVE)			
	W901F48DE	. COUPLING, CLAMP, GROOVED (79326)	1	*	PAOZZ
		(MCDONNELL SPEC 7M550-48D) (INCLUDES SLEEVE)			
15	MS29513-234	. PACKING	2		PAOZZ

LENGTH/SIZE TO BE DETERMINED AT
INSTALLATION.

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161924 AND UP	F/A-18A/B

Figure 1. Siphon Breaker Check Valve (5VAS545) (Sheet 2)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
VENT LINE FLAME ARRESTOR (5MPS504 OR 5MPT505)
FUEL PRESSURIZATION AND VENT SYSTEM

Reference Material

Line Maintenance Access Doors A1-F18AC-LMM-010

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Record of Applicable Technical Directives

None

Support Equipment Required

NOTE

Nomenclature	Part Number or Type Designation	This procedure is written for the left arrestor and is identical for the right arrestor.
Torque Wrench, 5 to 50 Inch-Pounds	-	

1. REMOVAL.

a. On 161353 THRU 162909, do substeps below:

Materials Required

Nomenclature	Specification or Part Number	(1) Open door 99L or 99R (A1-F18AC- LMM-010).
Sealing Compound	MIL-S-8802 Type 2, Class A 1/2 (CAGE 81349)	(2) Remove screws (2, 3, and 4, figure 1, sheet 1), washers, and nuts. (3) Remove door 98L or 98R (A1-F18AC- LMM-010).

(4) Remove flame arrestor (1) from vent tube.

b. On 163092 AND UP, do substeps below:

(1) Remove door 98L or 98R (A1-F18AC-LMM-010).

(2) Remove screws (2 and 3, figure 1, sheet 2), nuts, and washers.

(3) Remove flame arrestor (1) from door 98L/R and separate bracket (5) from flame arrestor if possible.

2. INSTALLATION.

a. On 161353 THRU 162909, do substeps below:

(1) Position arrestor (1, figure 1, sheet 1) so that holes in vent tube align with holes in arrestor (1).

(2) Install door 98L or 98R (A1-F18AC-LMM-010).



Sealing Compound

3

(3) Apply sealing compound to screws (2, 3, and 4).

(4) Install screws (2, 3, and 4), washers, and nuts and torque 15 to 25 inch-pounds. (QA)

(5) Install door 99L or 99R (A1-F18AC-LMM-010).

b. On 163092 AND UP, do substeps below:



Sealing Compound

3

(1) Apply sealing compound between bracket (5, figure 1, sheet 2) and flame arrestor.

(2) Position bracket (5) and flame arrestor (1) in door 98L/R.

(3) Install screws (2 and 3), washers, and nuts. Torque screws 15 to 25 inch-pounds.

(4) Install door 98L or 98R (A1-F18-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

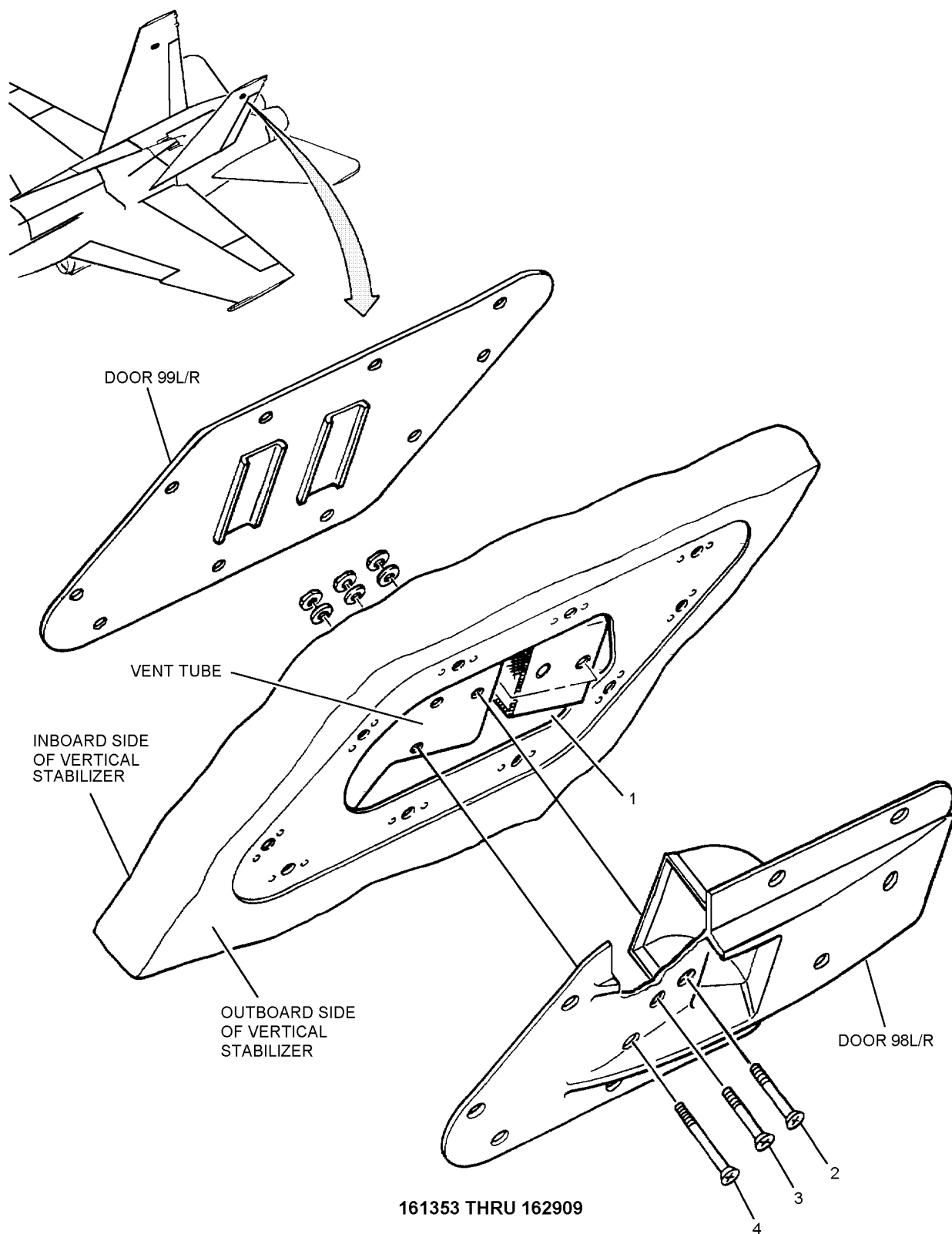
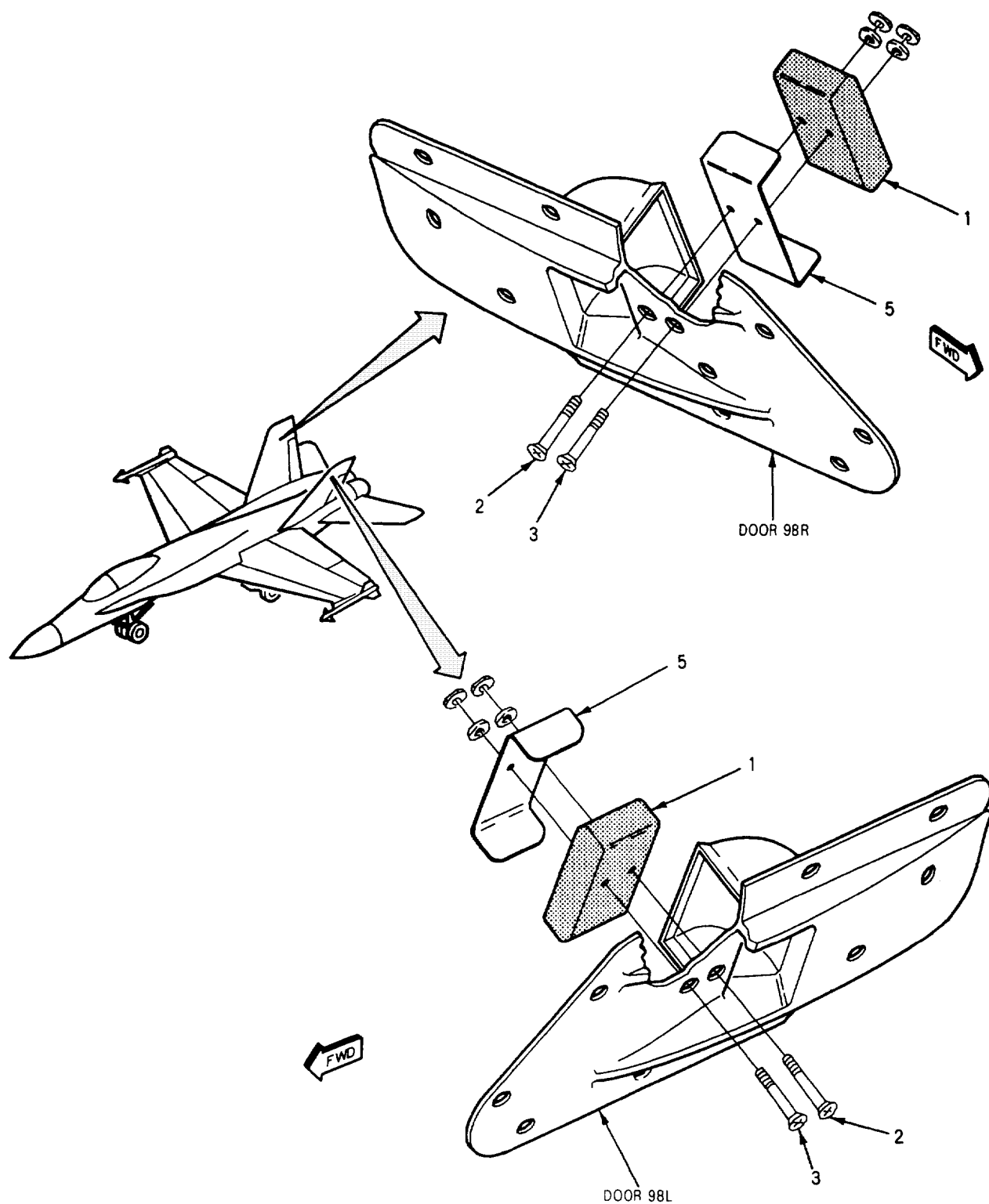


Figure 1. Vent Line Flame Arrestor (5MPS504 or 5MPT505) (Sheet 1)



163092 AND UP

Figure 1. Vent Line Flame Arrestor (5MPS504 or 5MPT505) (Sheet 2)

1580001B

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		VENT LINE FLAME ARRESTOR									
		(5MPS504 OR 5MPT505)									
1	AF86-3992-1	.	ARRESTOR, FLAME - FUEL (VENT LINE						1		PAOZZ
			FLAME ARRESTOR) (99321)								
			(MCDONNELL SPEC 74-580140-101)								
			(5MPS504 OR 5MPT505)								
	AF86-3992	.	SEE ABOVE						1	*	PAOZZ
	2408403-101	.	SEE ABOVE (98769)						1	*	PAOZZ
	74B580189-1001	.	SEE ABOVE (76301)						1	*	PAOZZ
2	NAS663V26HT	.	SCREW						1		PAOZZ
	AN960C10L	.	WASHER (USE WITH INDEX 2)						1		PAOZZ
	NAS1291C3M	.	NUT (USE WITH INDEX 2)						1		PAOZZ
3	NAS663V28HT	.	SCREW						1		PAOZZ
	AN960C10L	.	WASHER (USE WITH INDEX 3)						1		PAOZZ
	NAS1291C3M	.	NUT (USE WITH INDEX 3)						1		PAOZZ
4	NAS663V28HT	.	SCREW						1	A	PAOZZ
	AN960C10L	.	WASHER (USE WITH INDEX 4)						1		PAOZZ
	NAS1291C3M	.	NUT (USE WITH INDEX 4)						1		PAOZZ
5	74A586429-2367	.	BRACKET (76301)						1	B	MDOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161353 THRU 162909	F/A-18A/B
B	163092 & UP	F/A-18A/B

Figure 1. Vent Line Flame Arrestor (5MPS504 or 5MPT505) (Sheet 3)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

VERTICAL STABILIZER VENT TANK FUEL (5A-S149 OR 5A-T150)

FUEL PRESSURIZATION AND VENT SYSTEM

EFFECTIVITY: 161353 THRU 161528

Reference Material

Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Wiring Repair Manual	A1-F18AC-WRM-000
Aircraft Electric and Electronic Wiring	NAVAIR 01-1A-505

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Record of Applicable Technical Directives

None

Support Equipment Required

None

NOTE

Procedure applicable for left or right sensor or plug.

Materials Required

1. REMOVAL.

Nomenclature	Specification or Part Number
--------------	---------------------------------

Packing	MS29513-113
Petrolatum, Technical	VV-P-236 (CAGE 81348)

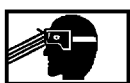
a. Make sure electrical power is not applied (A1-F18AC-LMM-000).

b. Drain vent tank per substeps below:

(1) Position an approved safety container under vent tank drain valve (A1-F18AC-LMM-000).



Jet Fuel



7

WARNING

To prevent personal injury, do not stand directly under drain valve when opening drain valve.

(2) Open drain valve.

(3) Close drain valve when all residual fuel has drained.

c. Remove door 88L or 88R (A1-F18AC-LMM-010), as applicable.

d. If removing sensor (5, figure 1) to replace packing (6), do substeps below:

(1) Remove clamps (1 and 2) and attaching parts.

(2) Remove any string ties restricting movement of sensor (5).

(3) Remove sensor (5), packing (6), and attaching parts.

e. If replacing sensor (5, figure 1) with plug (7), do substeps below:

(1) Remove clamps (1 and 2) and attaching parts.

(2) Remove string ties, as applicable.

(3) Remove sensor (5), packing (6), and attaching parts.

(4) Disconnect wires at WTS006 or WTT005 splice area.

(5) At splice area WTS006 or WTT005, dead end wires per NAVAIR 01-1A-505.

(6) Reposition wire bundle and install clamps (1 and 2) and attaching parts.

f. If plug (7, figure 1) is installed, remove plug (7), packing (6), and attaching parts.

2. INSTALLATION.



Petrolatum

1

a. Lubricate packing (6, figure 1) with petrolatum.

b. If installing sensor (5), do substeps below:

(1) Install packing (6) on sensor (5).

(2) Install sensor (5) and attaching parts.

(3) Install clamps (1 and 2) and attaching parts.

c. If installing plug (7), do substeps below:

(1) Install packing (6) on plug (7).

(2) Install plug (7) and attaching parts.

d. Install door 88L or 88R (A1-F18AC-LMM-010), as applicable.

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

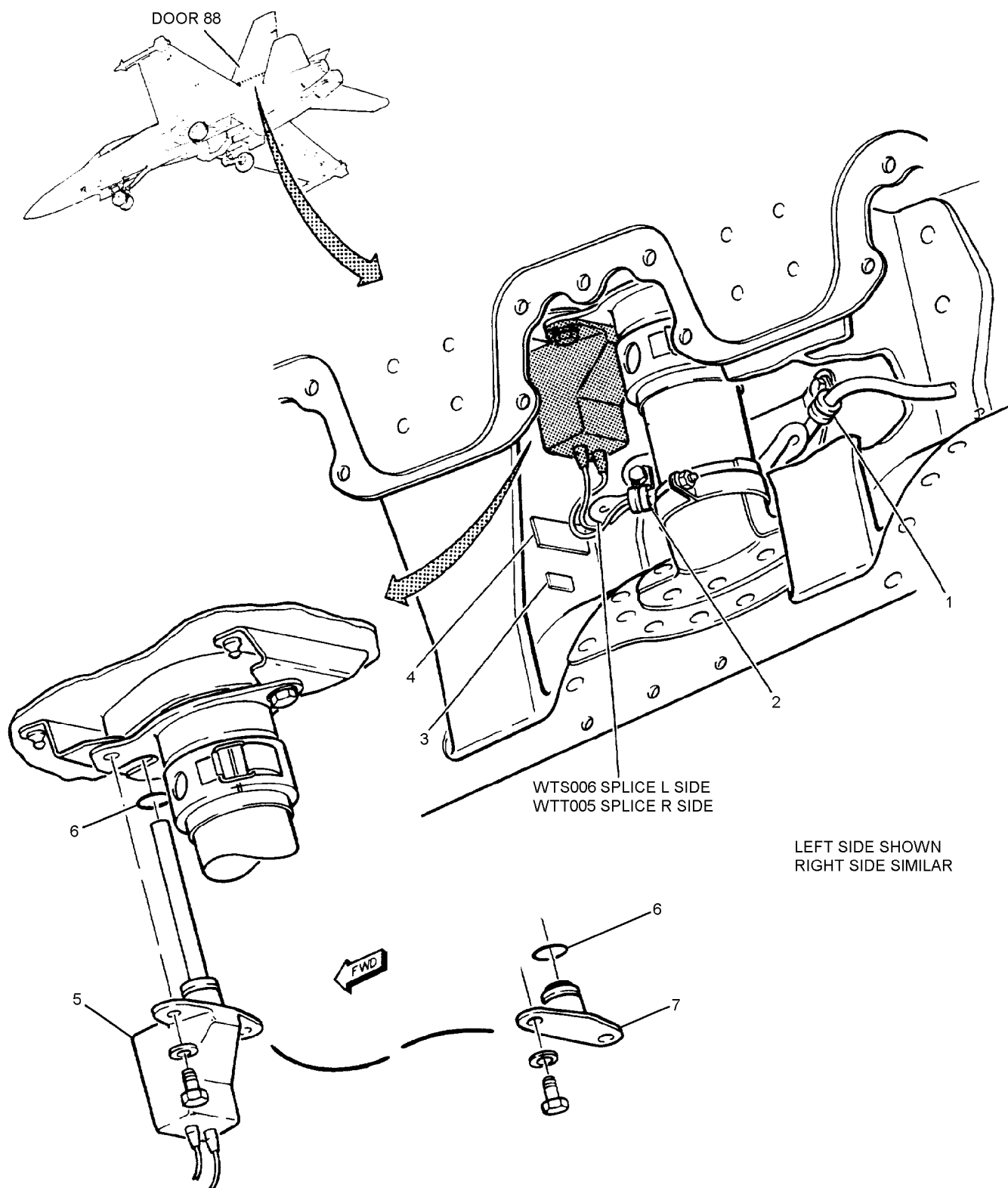


Figure 1. Vertical Stabilizer Vent Tank Fuel Sensor (5A-S149 or 5A-T150) (Sheet 1)

1590001A

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		VERTICAL STABILIZER VENT TANK FUEL			
		SENSOR (5A-S149 OR 5A-T150)			
1	M85052/1-4	. CLAMP	1		PAOZZ
	NAS673V1	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
	A11144-7-3	. NUT, CLIP (72962) (MCDONNELL SPEC	1	*	PAOZZ
		ST3M523C3M) (USE WITH INDEX 1)			
	130091	. NUT CLIP (76530) (MCDONNELL SPEC	1	*	PAOZZ
		ST3M523C3M) (USE WITH INDEX 1)			
2	M85052/1-6	. CLAMP	1		PAOZZ
	NAS673V1	. BOLT (AP)	1		PAOZZ
	AN960JD10L	. WASHER (AP)	1		PAOZZ
	A11144-7-3	. NUT, CLIP (72962) (MCDONNELL SPEC	1		PAOZZ
		ST3M523C3M) (USE WITH INDEX 2)			
	130091	. NUT, CLIP (76530) (MCDONNELL SPEC	1		PAOZZ
		ST3M523C3M) (USE WITH INDEX 2)			
3	74A885621-2518	. MARKER IDENTIFICATION - AVIONICS	1		MDOZZ
		(LEFT SIDE ONLY)			
	74A885621-2517	. MARKER IDENTIFICATION - AVIONICS	1		MDOZZ
		(RIGHT SIDE ONLY)			
4	74A586555-2037 @	. PLATE IDENTIFICATION (76301)	1		MDOZZ
		(LEFT SIDE ONLY)			
	74A586555-2029	. PLATE IDENTIFICATION (76301)	1	A	MDOZZ
		(LEFT SIDE ONLY)			
	74A586555-2039 @	. PLATE IDENTIFICATION (76301)	1		MDOZZ
		(RIGHT SIDE ONLY)			
	74A586555-2031	. PLATE IDENTIFICATION (76301)	1	A	MDOZZ
		(RIGHT SIDE ONLY)			
5	1858-1-2	. PROBE (VERTICAL STABILIZER VENT	1		XBOZZ
		TANK FUEL SENSOR) (30242)			
		(MCDONNELL SPEC 74-790069-101)			
		(5A-5149 AND 5A-T150)			
		(SUPERSEDES 1858-1)			
	NAS673V4	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ
6	MS29513-113	. PACKING	1		PAOZZ
7	74A230200-9027	. PLUG (76301) (REPLACES 1858-1-1 AND	1		XBOZZ
		1858-1-2 VERTICAL STABILIZER VENT			
		TANK FUEL SENSOR)			
	NAS673V4	. BOLT (AP)	2		PAOZZ
	AN960JD10L	. WASHER (AP)	2		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

@ MUST BE INSTALLED WITH 1858-1-2 SENSOR.

CODE	USABLE ON	MODEL
A	161353 THRU 161528	F/A-18A/B

Figure 1. Vertical Stabilizer Vent Tank Fuel Sensor (5A-S149 or 5A-T150) (Sheet 2)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
FUEL QUANTITY INDICATOR (5A-H013)
FUEL QUANTITY SYSTEM

Reference Material

Fuel System	A1-F18AC-460-200
Fuel Quantity Gaging and Low Level Warning System Test	WP024 00
Line Maintenance Procedures	A1-F18AC-LMM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

None



Materials Required

None

To prevent damage to indicator electromagnetic interference finger seals, do not pry indicator from instrument panel along top or sides. If required, pry indicator at corners.

1. REMOVAL.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).

b. Remove screws (3, figure 1).

c. Pull indicator (2) by gently prying evenly at corners. Disconnect connector (1).

2. INSTALLATION.

a. Inspect indicator (2, figure 1) for damage to finger seals. If more than three adjacent fingers are missing or more than 50% are missing around circumference of indicator, replace indicator.

b. Prepare mating surfaces of instrument panel and indicator (2) for electrical bond (A1-F18AC-LMM-000).

c. Make sure electrical power is not applied (A1-F18AC-LMM-000).

d. Connect connector (1, figure 1).

e. Install indicator (2) and screws (3).

f. Do PREPARATION and BIT TEST of fuel quantity gaging and low level warning system test (A1-F18AC-460-200, WP024 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

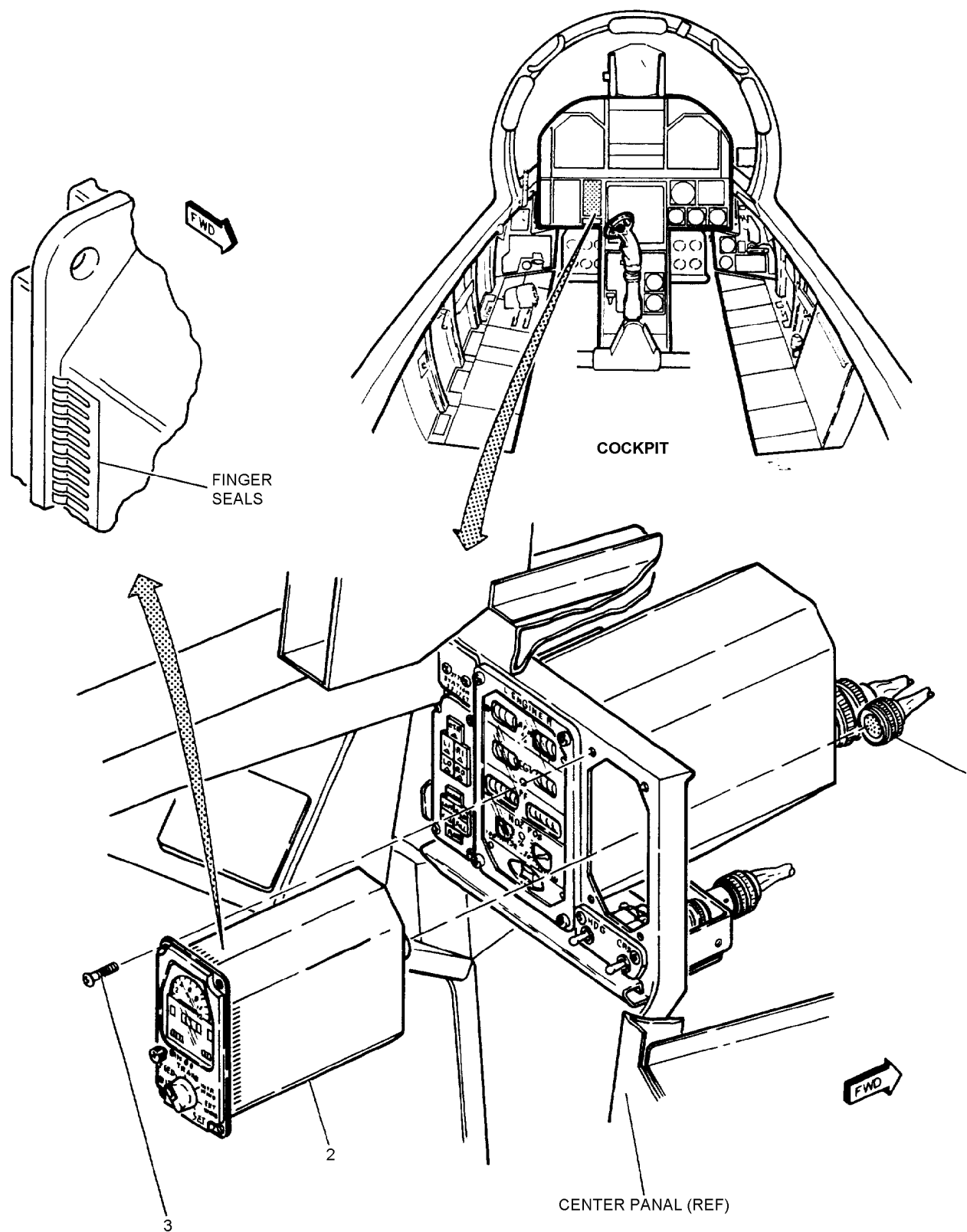


Figure 1. Fuel QTY Indicator (5A-H013) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
1	MS27467T17B35S	FUEL QTY INDICATOR (5A-H013)	1		PAOZZ
2	473002-002	. CONNECTOR, PLUG (5P-H013)	1		PAODD
		. INDICATOR, LIQUID QUANTITY - FUEL			
		(FUEL QTY INDICATOR) (89305)			
		(MCDONNELL SPEC 74-580056-237)			
		(5A-H013)			
	473002-001	. SEE ABOVE	1	*	PAODD
3	MS35214-43	. SCREW	4		PAOZZ
	MS21075L08	. NUT, PLATE (USE WITH INDEX 3)	4		PAOZZ
	MS20426AD3 #	. RIVET (AP)	8		-
* ALTERNATE OR EQUIVALENT PARTS. (WP002 00)					
# LENGTH/SIZE TO BE DETERMINED AT INSTALLATION.					

Figure 1. Fuel QTY Indicator (5A-H013) (Sheet 2)

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
FUEL QUANTITY REPEATER INDICATOR (5A-K015)
FUEL QUANTITY SYSTEM
EFFECTIVITY: F/A-18B

Reference Material

Fuel System	A1-F18AC-460-200
Fuel Quantity Gaging and Low Level Warning System Test	WP024 00
Line Maintenance Procedures	A1-F18AC-LMM-000

Alphabetical Index

Subject	Page No.
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Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required

None

1. REMOVAL.

- a. Make sure electrical power is not applied (A1-F18AC-LMM-000).
- b. Remove screws (3, figure 1) from indicator (2).
- c. Pull out indicator (2) and disconnect connector (1).

2. INSTALLATION.

- a. Make sure electrical power is not applied (A1-F18AC-LMM-000).
- b. Connect connector (1, figure 1) to indicator (2).
- c. Install indicator (2) with screws (3).
- d. Do PREPARATION and BIT TEST of fuel quantity gaging and low level warning system test (A1-F18AC-460-200, WP024 00).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

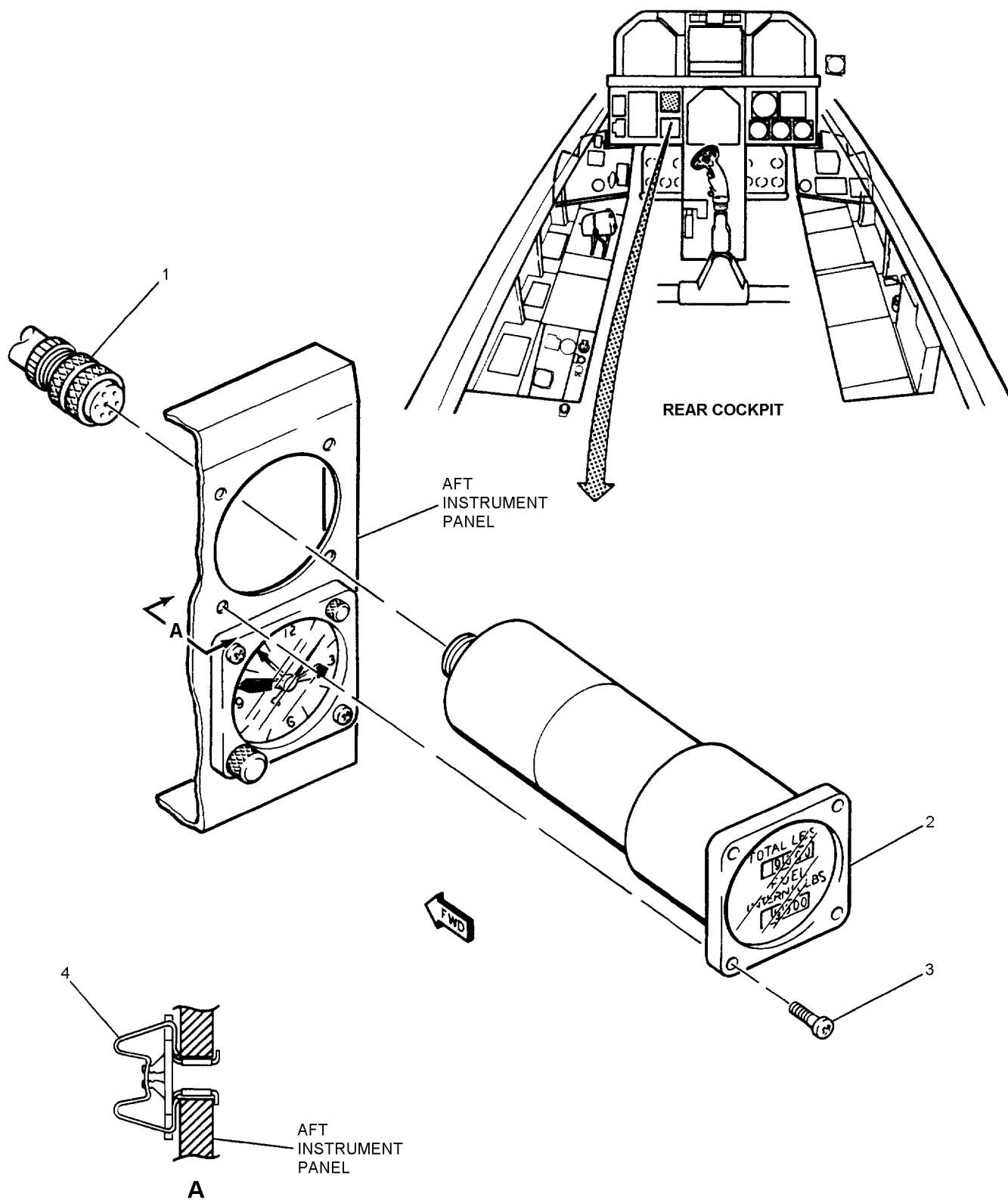


Figure 1. Fuel Quantity Repeater Indicator (5A-K015) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		FUEL QUANTITY REPEATER INDICATOR									
		(5A-K015)									
1	MS27467T13B35S	.						CONNECTOR, PLUG (SP-K015)	1		PAOZZ
2	473003-001	.						INDICATOR, LIQUID QUANTITY -	1		PAODD
								REPEATER, FUEL (FUEL QUANTITY REPEATER INDICATOR) (89305) (MCDONNELL SPEC 74-580056-229) (5A-K015)			
	473003	.						INDICATOR, LIQUID QUANTITY -	1	*	PAODD
								REPEATER, FUEL (FUEL QUANTITY REPEATER INDICATOR) (89305) (MCDONNELL SPEC 74-580056-229) (5A-K015)			
3	MS51957-34B +	.						SCREW (SUPERSEDES MS35214-28)	4		PAOZZ
4	D5280-487C13 +	.						NUT (6F469) (MCDONNELL SPEC	4	*	PAOZZ
								3M1141-13 (SUPERSEDES NAS487-13)			
	K52969-06-13 +	.						SEE ABOVE (15653)	4	*	PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

+ USE MS35214 SCREW WITH NAS487 NUT.
USE MS51957 SCREW WITH 3M1141 NUT.
MS51987 SCREW AND 3M1141 NUT ARE
PREFERRED.

Figure 1. Fuel Quantity Repeater Indicator (5A-K015) (Sheet 2)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

FUEL QUANTITY GAGING INTERMEDIATE DEVICE (5A-F014)

FUEL QUANTITY SYSTEM

Reference Material

Fuel System	A1-F18AC-460-200
Fuel Quantity Gaging and Low Level Warning System Test	WP024 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Maintenance Status Display and Recording System	A1-F18AC-580-300
Signal Data Recorder RO-508/ASM-612	WP004 00

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 39	-	No. 1 Fuel Tank Interconnect Valve Replacement and Fuel Sequencing Modification (ECP MDA F/A-18-00072C1)	15 Oct 86	-

Support Equipment Required

None

Materials Required

None

1. REMOVAL.

a. Remove Signal Data Recorder RO-508/ASM-612 (A1-F18AC-580-300, WP004 00).

b. Disconnect connectors (1 and 6, figure 1) from receptacles (J1 and J2) respectively.

c. Remove bolts (3), washers (2), and intermediate device (4).

2. INSTALLATION.

a. Make sure electrical power is off (A1-F18AC-LMM-000).

b. Prepare mating surfaces of intermediate device (4), avionics equipment bay lower shelf, bolts (3), and

washers (2) for electrical bonding (A1-F18AC-LMM-000).

c. Install intermediate device on pins (7).

d. Install washers (2) and bolts (3).

e. Connect connectors (1 and 6) to receptacles (J1 and J2) respectively.

f. Install Signal Data Recorder RO-508/ASM-612 (A1-F18AC-580-300, WP004 00).

g. Do PREPARATION and BIT TEST of fuel quantity gaging and low level warning system test (A1-F18AC-460-200, WP024 00).

h. Close door 14R (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

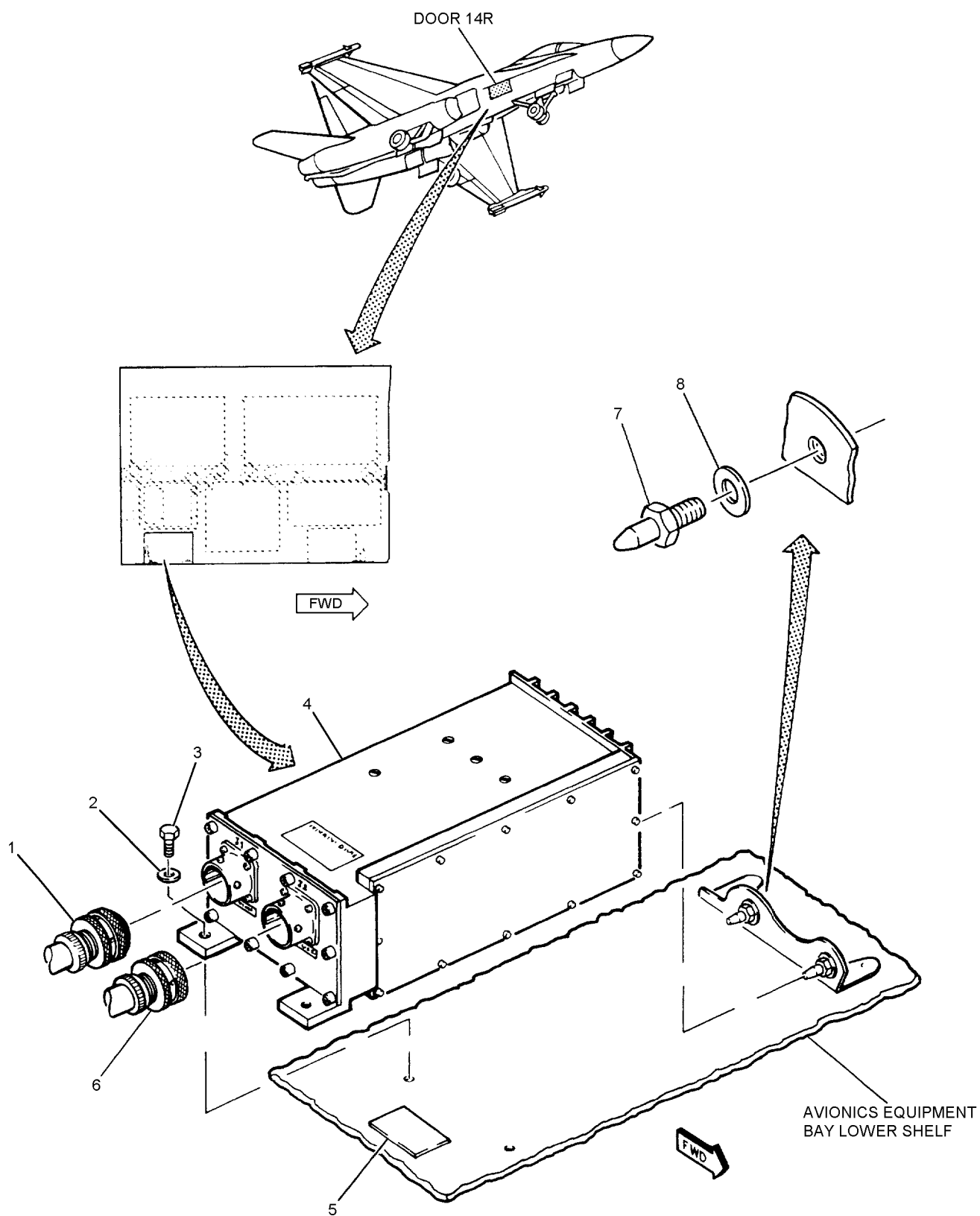


Figure 1. Fuel Quantity Gaging Intermediate (5A-F014) (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		FUEL QUANTITY GAGING INTERMEDIATE									
		DEVICE (5A-F014)									
1	MS27467T17B35SA	.						CONNECTOR, PLUG (5P-F014A)	1		PAOZZ
2	AN960JD10L	.						WASHER	2		PAOZZ
3	NAS673V7	.						BOLT	2		PAOZZ
4	473007-005	.						INTERMEDIATE DEVICE - LIQUID QUANTITY . . .	1	B	PAODD
		GAGING, FUEL (FUEL QUANTITY									
		GAGING INTERMEDIATE DEVICE) (89305)									
		(MCDONNELL SPEC 74-580056-263)									
		(5A-F014)									
	473007-004	.						INTERMEDIATE DEVICE - LIQUID QUANTITY . . .	1	A	PAODD
		GAGING, FUEL (FUEL QUANTITY GAGING									
		INTERMEDIATE DEVICE) (89305)									
		(MCDONNELL SPEC 74-580056-239)									
		(5A-F014)									
	473007-003	.						INTERMEDIATE DEVICE - LIQUID QUANTITY . . .	1	A*	PAODD
		GAGING, FUEL (FUEL QUANTITY									
		GAGING INTERMEDIATE DEVICE)									
		(89305) (MCDONNELL SPEC 74-580056-239)									
		(5A-F014)									
5	74A890012-2011	.						PLATE, IDENTIFICATION (76301)	1		MDOZZ
6	MS27467T17B35S	.						CONNECTOR, PLUG (5P-F014B)	1		PAOZZ
7	VS3258C4-2-4	.						PIN, SHOULDER, HEADLESS (92215)	2	*	PAOZZ
		(MCDONNELL SPEC 3M943C4-2-4)									
	AAP139C4-2-4	.						PIN, SHOULDER, HEADLESS (84256)	2	*	PAOZZ
		(MCDONNELL SPEC 3M943C4-2-4)									
	D792683C2N4	.						PIN, SHOULDER, HEADLESS (08524)	2	*	PAOZZ
		(MCDONNELL SPEC 3M943C4-2-4)									
8	4M36-02014	.						WASHER (76301)	2		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161353 THRU 161519 BEFORE F/A-18 AFC 39	F/A-18A/B
B	161520 & UP; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 39	F/A-18A/B

Figure 1. Fuel Quantity Gaging Intermediate (5A-F014) (Sheet 2)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****NO. 1 FUEL TANK FUEL QUANTITY TRANSMITTERS (5A-F028 OR 5A-F029)****FUEL QUANTITY SYSTEM****EFFECTIVITY: F/A-18A****Reference Material**

Fuel System	A1-F18AC-460-300
No. 1 Fuel Tank Access Cover - F/A-18A	WP003 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captain Manual	A1-F18AC-PCM-000

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Removal - Forward Transmitter	2

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 39	-	Tank Interconnect Valve Replacement and Fuel Sequencing Modification ECP MDA F/A-18-00072C1)	15 Oct 86	-

Support Equipment Required

Nomenclature	Part Number or Type Designation
--------------	------------------------------------

Torque Wrench, 0 to 25 Inch-Pounds	-
--	---

Torque Wrench, 0 to 120 Inch-Pounds	-
---	---

Materials Required

None

1. REMOVAL - FORWARD TRANSMITTER.

- a. Do general preparation for removal (WP013 00).
- b. Remove screws (5, 6, and 7, figure 1, sheet 2) from transmitter (3).
- c. Uncouple clamp (1).
- d. Remove transmitter (3).

2. REMOVAL - AFT TRANSMITTER.

- a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).
- b. Tag aircraft external power receptacle with an appropriate warning to indicate external power is not to be applied to the aircraft.
- c. Remove door 18 (A1-F18AC-LMM-010).
- d. Disconnect connector (1, figure 2).



To prevent damage to seal, which requires replacement of access cover, be careful when removing transmitter.

- e. On 161353 THRU 161519, BEFORE F/A-18 AFC 39, remove bolts, washers and transmitter (6, detail A).



To keep foreign objects from falling in tank, cover space between transmitter and opening in tank cover before removing screws attaching wires to transmitter.

NOTE

To keep wire bundle from falling in tank, secure wires on outside of tank cover before removing transmitter from hole in cover.

- f. On 161520 AND UP; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 39, remove bolts and washers, then carefully lift transmitter (4) to detach wires and screws (7, 8, and 9) from transmitter terminal block. Secure wire bundle outside access cover, to prevent loss in tank, then remove transmitter (4).

- g. Cover opening to prevent contamination.

3. INSTALLATION - FORWARD TRANSMITTER.

- a. Do general preparation for component installation (WP013 00).
- b. Install transmitter (3, figure 1, sheet 2) and secure with clamp (1). Make sure clamp (1) is securely locked by lightly pulling on clamp handle. (QA)
- c. If installing 472995-401 transmitter configuration X in place of 472995-301 transmitter, two washers (8, configuration X) may be added between lug and screw (6), two washers (9) between lug and screw (5), and one washer (10) between lug and screw (7) to make sure terminal lug is tight.
- d. Connect wires to transmitter terminals. Torque screw (6) to 7 inch-pounds, screw (5) to 12 inch-pounds, and screw (7) to 16 inch-pounds. (QA)
- e. Install no. 1 fuel tank access cover (WP003 00). Install door 18 (A1-F18AC-LMM-010).
- f. Connect utility and emergency battery connectors (WP013 00).
- g. Refuel aircraft using external electrical power (A1-F18AC-PCM-000).

- h. Set cockpit FUEL QTY selector to TRANS and check for correct no. 1 fuel tank fuel quantity (figure 1) on LEFT counter.

4. INSTALLATION - AFT TRANSMITTER.

a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).

b. Tag aircraft external power receptacle with an appropriate warning to indicate external power is not to be applied to the aircraft.

c. Prepare mating surfaces of transmitter (4 or 6, figure 2, detail A) and access cover for electrical bonding (A1-F18AC-LMM-000).



To prevent damage to seal, which requires replacement of access cover, be careful when installing transmitter.

d. On 161353 THRU 161519, BEFORE F/A-18 AFC 39, install transmitter (6) with arrow pointing FWD, and install bolts and washers. Torque bolts 50 to 70 inch-pounds. (QA)

e. On 161520 AND UP; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 39, position transmitter (4) with arrow pointing FWD and connect wires with

screws (7, 8, and 9) to transmitter terminal block and torque as listed below: (QA)

(1) Torque screw (9) to 7 inch-pounds.

(2) Torque screw (7) to 12 inch-pounds.

(3) Torque screw (8) to 16 inch-pounds.

f. On 161520 AND UP; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 39 install transmitter (4), bolts, and washers. Torque bolts 50 to 70 inch-pounds. (QA)

g. Attach connector (1, figure 2).

h. Refuel aircraft using external electrical power (A1-F18AC-PCM-000).

i. Set cockpit FUEL QTY selector to TRANS and check for correct no. 1 fuel tank fuel quantity (figure 1) on LEFT counter.

j. Install door 18 (A1-F18AC-LMM-010).

5. ILLUSTRATED PARTS BREAKDOWN.

6. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

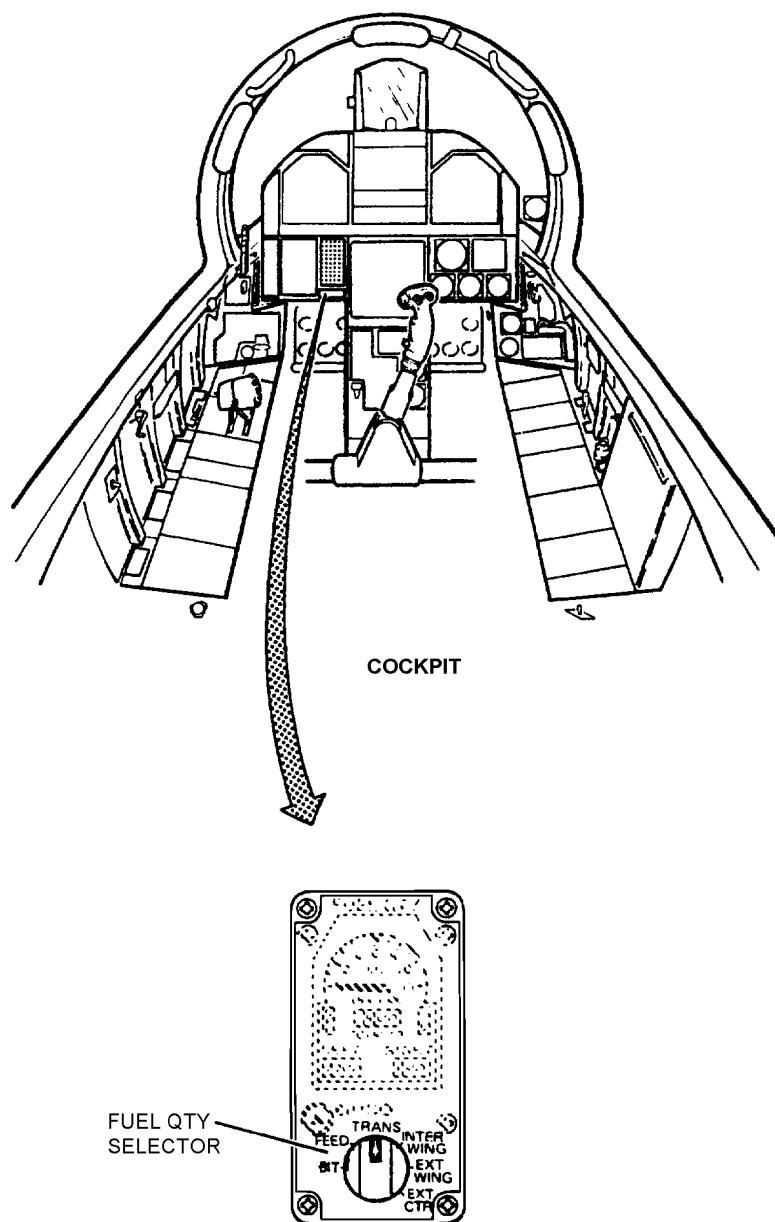


Figure 1. No. 1 Fuel Tank Forward Fuel Quantity Transmitter (5A-F028) (Sheet 1)

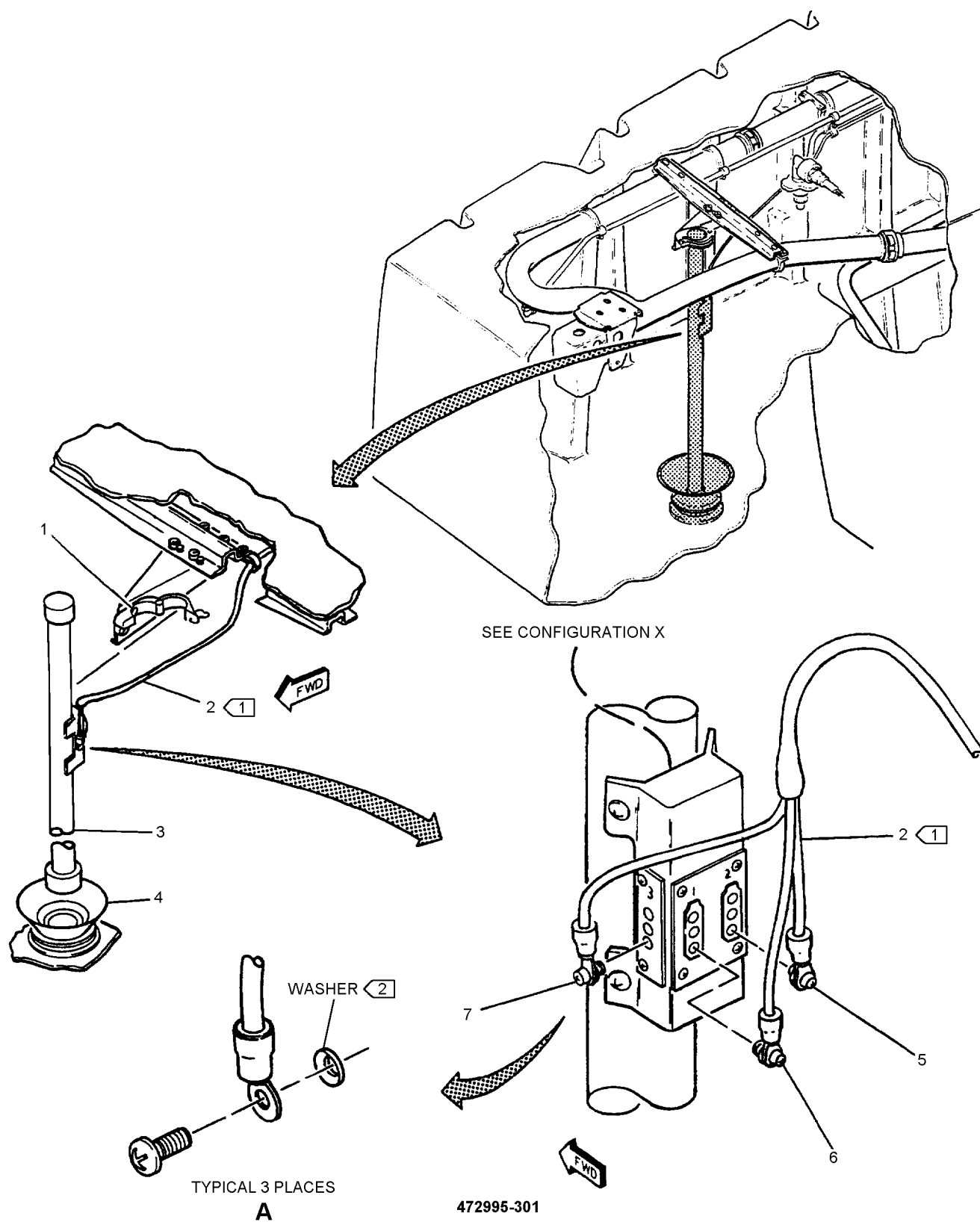
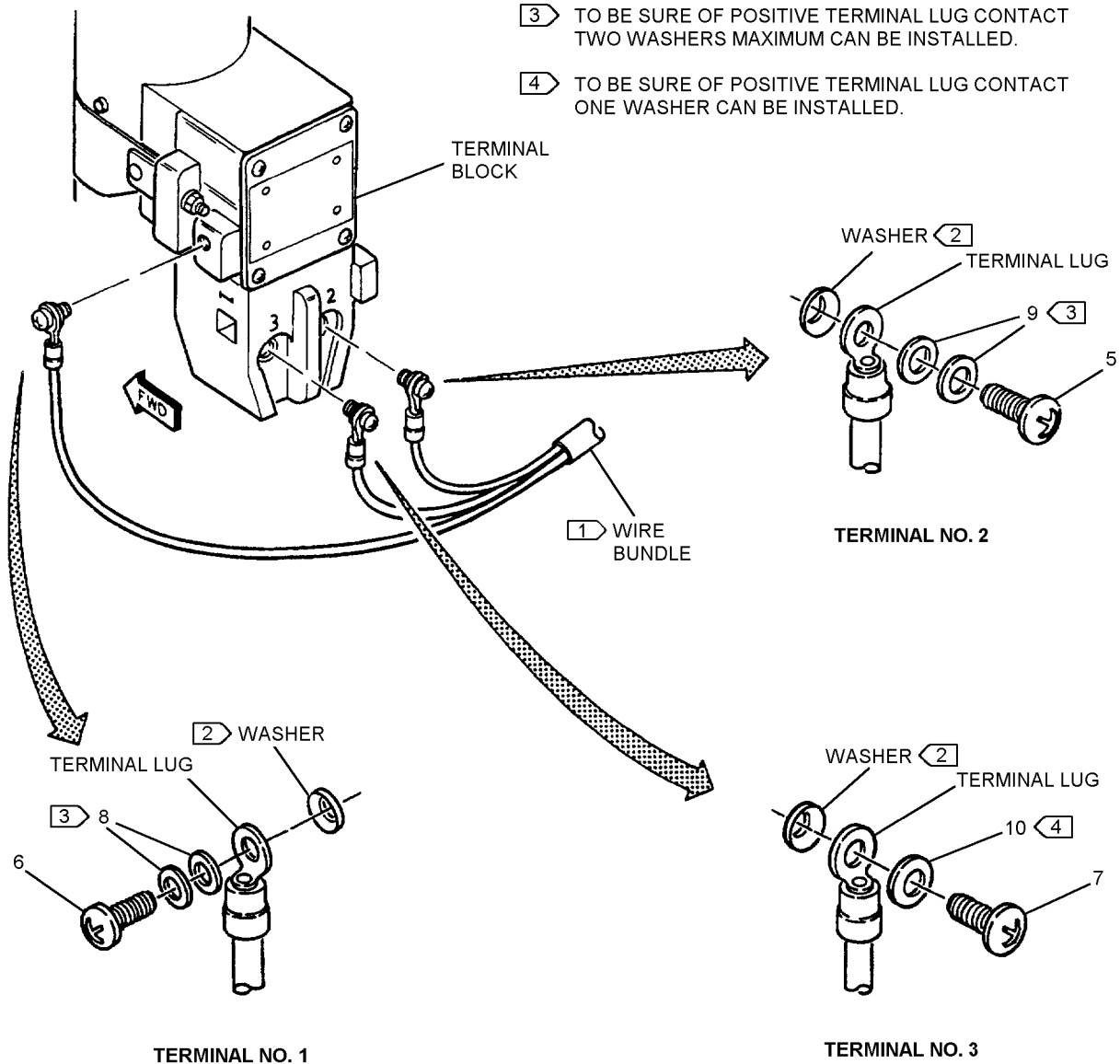


Figure 1. No. 1 Fuel Tank Forward Fuel Quantity Transmitter (5A-F028) (Sheet 2)

LEGEND

- 1 TO LOCATE WIRE TERMINAL REPAIR INFORMATION IN A1-F18AC-WRM-000 USE WRA REFERENCE DESIGNATOR AND TERMINAL NUMBER.
- 2 CONCAVE SIDE OF WASHER FACES TERMINAL LUG.
- 3 TO BE SURE OF POSITIVE TERMINAL LUG CONTACT TWO WASHERS MAXIMUM CAN BE INSTALLED.
- 4 TO BE SURE OF POSITIVE TERMINAL LUG CONTACT ONE WASHER CAN BE INSTALLED.



472995-401
CONFIGURATION X

Figure 1. No. 1 Fuel Tank Forward Fuel Quantity Transmitter (5A-F028) (Sheet 3)

1630001C

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 1 FUEL TANK FORWARD FUEL QUANTITY TRANSMITTER (5A-F028)			
1	7C85-24-1AA	. CLAMP, QUICK RELEASE (71286) (MCDONNELL SPEC ST9M427W24A)	1		PAOZZ
	7C34-24-2A	. SEE ABOVE (MCDONNELL SPEC ST9M427W24)	1	*	PAOZZ
2	74A753224-9AAB	. CABLE ASSY, ELECTRICAL - FORWARD FUSELAGE - W53224 (76301) (FOR WIRING REPAIR SEE A1-F18AC-WRM-000)	1	A	XBOOO
	74A753224-9BVA	. CABLE ASSY, ELECTRICAL - FORWARD FUSELAGE - W53224 (76301) (FOR WIRING REPAIR SEE A1-F18AC-WRM-000)	1	B	XBOOO
3	472995-401	. TRANSMITTER, LIQUID QUANTITY, TANK NO. 1, FORWARD (NO. 1 FUEL TANK FORWARD FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-205) (5A-F028)	1		PAOZZ
	472995-301	. TRANSMITTER, LIQUID QUANTITY TANK NO. 1, FORWARD (NO. 1 FUEL TANK FORWARD FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-205) (5A-F028)	1	*	PAOZZ
4	74A582073-2001	. SUPPORT, TRANSMITTER (76301)	1		PAOZZ
	74A582062-2001	. SEE ABOVE	1	*	PAOZZ
	NAS673V2	. BOLT (AP)	3		PAOZZ
	AN960JD10L	. WASHER (AP)	3	*	PAOZZ
5	466604-008	. SCREW, EXTERNALLY RELIEVED BODY (89305) (MCDONNELL SPEC ST3M560-5)	1	*	PAOZZ
	MA3560-5	. SCREW, EXTERNALLY RELIEVED BODY (58845) (MCDONNELL SPEC ST3M560-5)	1	*	PAOZZ
	1AM121070-5	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-5	. SEE ABOVE (58998)	1	*	PAOZZ
	396648	. WASHER, CONICAL (89305) (MCDONNELL SPEC ST4M159-08) (UNDER LUG) (USE WITH INDEX 5)	1	*	PAOZZ
	448-3-2	. WASHER, CONICAL (86968) (MCDONNELL SPEC ST4M159-08) (UNDER LUG) (USE WITH INDEX 5)	1	*	PAOZZ
6	466604-006	. SCREW, EXTERNALLY RELIEVED BODY (89305) (MCDONNELL SPEC ST3M560-4)	1	*	PAOZZ
	MA3560-4	. SCREW, EXTERNALLY RELIEVED BODY (58845) (MCDONNELL SPEC ST3M560-4)	1	*	PAOZZ
	1AM121070-4	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-4	. SEE ABOVE (58998)	1	*	PAOZZ
	396973	. WASHER, CONICAL (89305) (MCDONNELL SPEC ST4M159-06) (UNDER LUG) (USE WITH INDEX 6)	1	*	PAOZZ
	448-3-1	. WASHER, CONICAL (86968) (MCDONNELL SPEC ST4M159-06) (UNDER LUG) (USE WITH INDEX 6)	1	*	PAOZZ
7	466604-010	. SCREW, EXTERNALLY RELIEVED BODY (89305) (MCDONNELL SPEC ST3M560-6)	1	*	PAOZZ
	MA3560-6	. SCREW, EXTERNALLY RELIEVED BODY (57845) (MCDONNELL SPEC ST3M560-6)	1	*	PAOZZ
	1AM121070-6	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-6	. SEE ABOVE (58998)	1	*	PAOZZ
	396974	. WASHER, CONICAL (89305) (MCDONNELL SPEC ST4M159-3) (UNDER LUG) (USE WITH INDEX 7)	1	*	PAOZZ

Figure 1. No. 1 Fuel Tank Forward Fuel Quantity Transmitter (5A-F028) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
	448-3-3	.							1	*	PAOZZ
8	NAS620C6 +	.							2		PAOZZ
9	AN960C8 +	.							2		PAOZZ
10	AN960C10L +	.							1		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

+ USE WITH 472995-401

CODE	USABLE ON	MODEL
A	161353 THRU 161519	F/A-18A
B	161520 & UP	F/A-18A

Figure 1. No. 1 Fuel Tank Forward Fuel Quantity Transmitter (5A-F028) (Sheet 5)

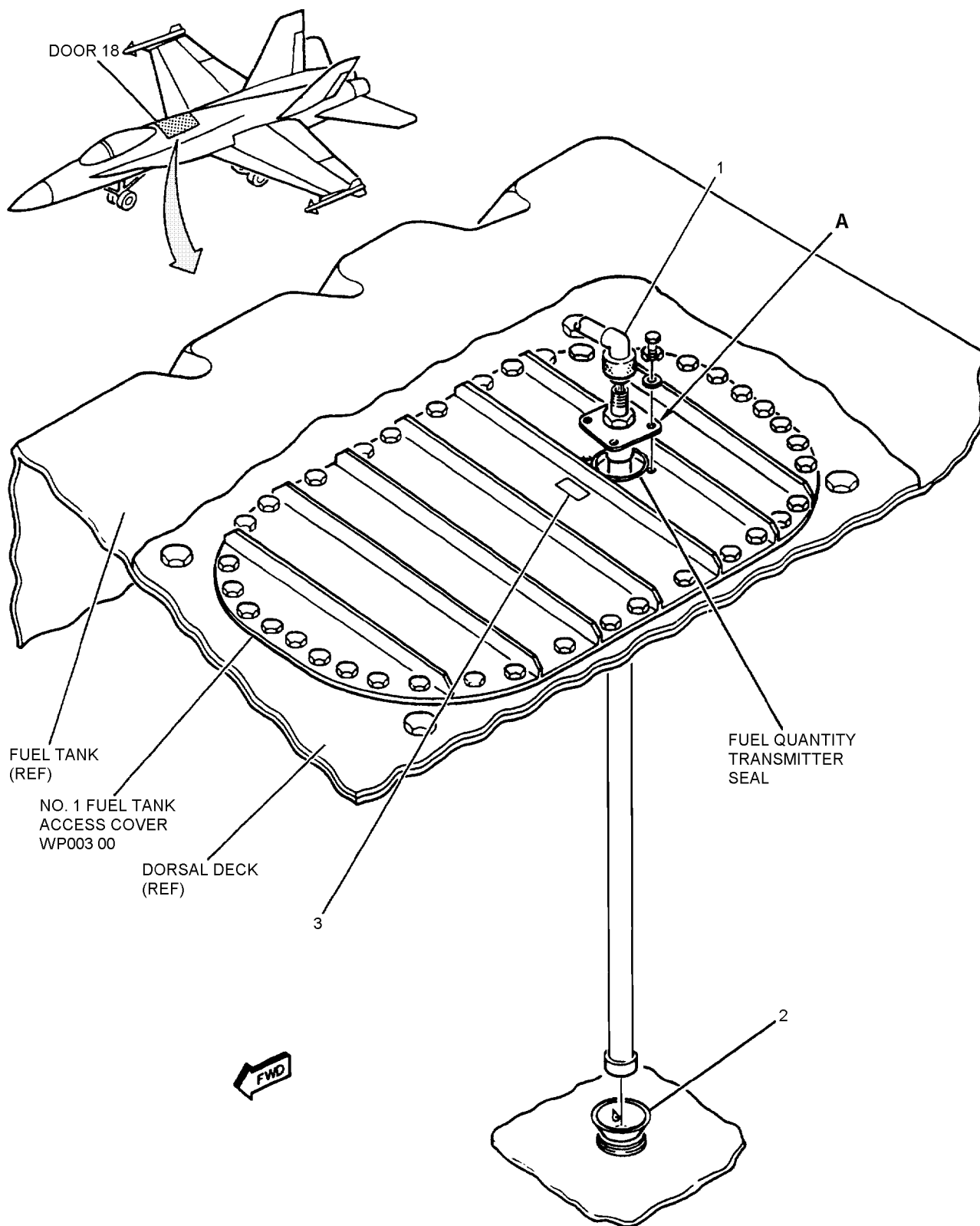


Figure 2. No. 1 Fuel Aft Fuel Quantity Transmitter (5A-F029) (Sheet 1)

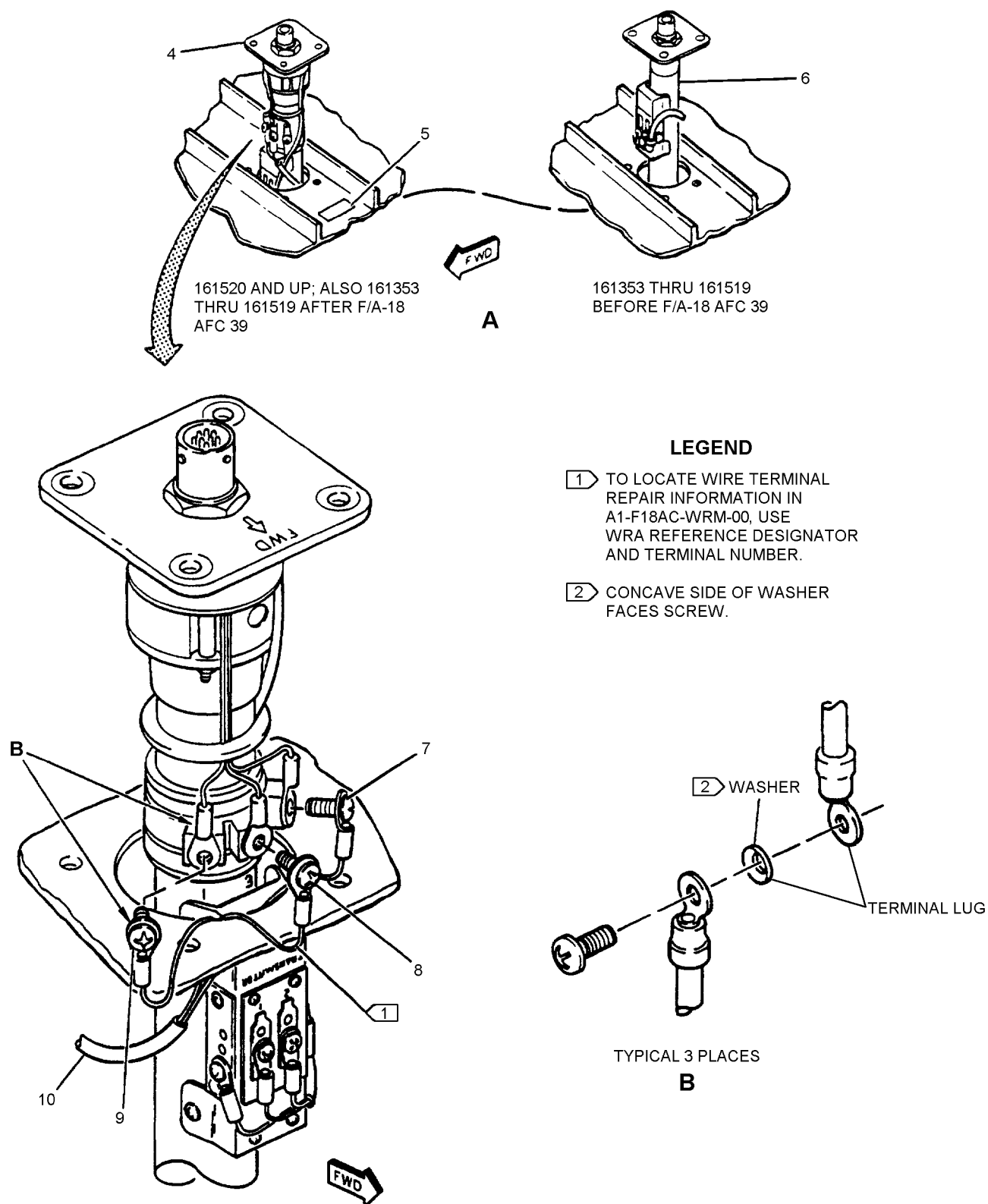


Figure 2. No. 1 Fuel Aft Fuel Quantity Transmitter (5A-F029) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 1 FUEL TANK AFT FUEL QUANTITY			
		TRANSMITTER (5A-F029)			
1	MS27467T9B35S	. CONNECTOR, PLUG (5P-F029)	1		PAOZZ
2	74A582073-2003	. SUPPORT, TRANSMITTER (76301)	1		PAOZZ
	74A582062-2003	. SEE ABOVE	1	*	PAOZZ
3	74A890601-2326	. PLATE, IDENTIFICATION (76301)	1		MDOZZ
4	472995-602	. TRANSMITTER, LIQUID QUANTITY, TANK	1	A	PAOZZ
		NO. 1, AFT (NO. 1 FUEL TANK AFT FUEL QUANTITY TRANSMITTER) (89305)			
		(MCDONNELL SPEC 74-580056-207) (5A-F029)			
	472995-502	. SEE ABOVE	1	A*	PAOZZ
	472995-402	. TRANSMITTER, LIQUID QUANTITY, TANK	1	A*	PAOZZ
		NO. 1, AFT (NO. 1 FUEL TANK AFT FUEL QUANTITY TRANSMITTER - F/A-18A)			
		(89305) (MCDONNELL SPEC 74-580056-207)			
		(5A-F029)			
	NAS674V5	. BOLT (AP)	4		PAOZZ
	AN960JD416	. WASHER (AP)	4		PAOZZ
5	74R890003-2001	. MARKER, INSTRUCTIONAL (76301)	1	C	MDOZZ
6	472995-302	. TRANSMITTER, LIQUID QUANTITY,	1	B*	PAOZZ
		NO. 1, AFT (NO. 1 FUEL TANK AFT FUEL QUANTITY TRANSMITTER) (89305)			
		(MCDONNELL SPEC 74-580056-207) (5A-F029)			
	NAS674V5	. BOLT (AP)	4		PAOZZ
	AN960JD416	. WASHER (AP)	4		PAOZZ
7	466604-008	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(89305) (MCDONNELL SPEC ST3M560-5)			
	MA3560-5	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(58845) (MCDONNELL SPEC ST3M560-5)			
	1AM121070-5	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-5	. SEE ABOVE (58998)	1	*	PAOZZ
	396648	. WASHER, CONICAL (89305) (MCDONNELL SPEC ST4M159-08) (USE WITH INDEX 7)	1	*	PAOZZ
	448-3-2	. WASHER, CONICAL (86968) (MCDONNELL SPEC ST4M159-08) (USE WITH INDEX 7)	1	*	PAOZZ
8	466604-010	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(89305) (MCDONNELL SPEC ST3M560-6)			
	MA3560-6	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(58845) (MCDONNELL SPEC ST3M560-6)			
	1M121070-6	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-6	. SEE ABOVE (58998)	1	*	PAOZZ
	396974	. WASHER, CONICAL (89305) (MCDONNELL SPEC ST4M159-3) (USE WITH INDEX 8)	1	*	PAOZZ
	448-3-3	. WASHER, CONICAL (86968) (MCDONNELL SPEC ST4M159-3) (USE WITH INDEX 8)	1	*	PAOZZ
9	466604-006	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(89305) (MCDONNELL SPEC ST3M560-4)			
	MA3560-4	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(58845) (MCDONNELL SPEC ST3M560-4)			
	1AM121070-4	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-4	. SEE ABOVE (58998)	1	*	PAOZZ
	396973	. WASHER, CONICAL (89305) (MCDONNELL SPEC ST4M159-06) (USE WITH INDEX 9)	1	*	PAOZZ

Figure 2. No. 1 Fuel Aft Fuel Quantity Transmitter (5A-F029) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
	448-3-1	. WASHER, CONICAL (86968) (MCDONNELL SPEC ST4M159-06) (USE WITH INDEX 9)	1	*	PAOZZ
10	74A753224-9AAB	. CABLE ASSY, ELECTRICAL FORWARD FUSELAGE - W53224 (76301) (FOR WIRING REPAIR SEE A1-F18AC-WRM-000)	1	B	XBOOO
	74A753224-9BVA	. CABLE ASSY, ELECTRICAL FORWARD FUSELAGE - W53224 (76301) (FOR REPAIR SEE A1-F18AC-WRM-000)	1	A	XBOOO

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

CODE	USABLE ON	MODEL
A	161520 AND UP; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 39	F/A-18A
B	161353 THRU 161519 BEFORE F/A-18 AFC 39	F/A-18A
C	161353 THRU 161519 AFTER F/A-18 AFC 39	F/A-18A

Figure 2. No. 1 Fuel Aft Fuel Quantity Transmitter (5A-F029) (Sheet 4)

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****NO. 1 FUEL TANK FUEL QUANTITY TRANSMITTERS (5A-E028 OR 5A-F029)****FUEL QUANTITY SYSTEM****EFFECTIVITY: F/A-18B**

Reference Material

Fuel System	A1-F18AC-460-300
No. 1 Fuel Tank Access Cover - F/A-18B	WP004 00
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captain Manual	A1-F18AC-PCM-000
Seat, Canopy and Survival Equipment	A1-F18AC-120-300
Canopy (Original) Removal and Installation	WP086 00

Alphabetical Index

Subject	Page No.
Illustrated Parts Breakdown	3
Installation - Aft Transmitter	3
Installation - Forward Transmitter	2
Removal - Aft Transmitter	2
Removal - Forward Transmitter	2

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 39	-	No. 1 Fuel Tank Interconnect Valve Replacement and Fuel Sequencing Modification (ECP MDA F/A-18-00072C1)	15 Oct 86	-

Support Equipment Required

Nomenclature	Part Number or Type Designation
---------------------	--

Torque Wrench, 0 to 25 Inch-Pounds	-
--	---

Torque Wrench, 0 to 120 Inch-Pounds	-
---	---

Materials Required

None

1. REMOVAL - FORWARD TRANSMITTER.

a. Do general preparation for removal (WP013 00).

b. Remove wires from transmitter (1, figure 1, detail A) by removing screws (7, 8, and 9).

c. Remove transmitter (1).

2. REMOVAL - AFT TRANSMITTER.

a. Tag aircraft external power receptacle with an appropriate warning to indicate external power is not to be applied to the aircraft.

b. Remove canopy (A1-F18AC-120-300, WP086 00).

c. Remove internal door CPJ (A1-F18AC-LMM-010).

d. Disconnect connector (1, figure 2).



To prevent damage to seal which requires replacement of access cover, be careful when removing transmitter.

e. On 161354 THRU 161360, BEFORE F/A-18 AFC 39, remove bolts, washers and transmitter (6, detail A).



To keep foreign objects from falling in tank, cover space between transmitter and opening in tank cover before removing screws attaching wires to transmitter.

NOTE

To keep wire bundle from falling in tank, secure wires on outside of tank cover before removing transmitter from hole in cover.

f. On 161704 AND UP; ALSO 161364 THRU 161360 AFTER F/A-18 AFC 39, remove bolts and washers, then carefully lift transmitter (4, detail A) to detach wires and screws (7, 8, and 9) from transmitter terminal block. Secure wire bundle outside access cover, to prevent loss in tank, then remove transmitter (4).

3. INSTALLATION - FORWARD TRANSMITTER.

a. Do general preparation for component installation (WP013 00).

b. Install transmitter (1, figure 1, detail A) and secure with clamp (3). Make sure clamp (3) is securely locked by lightly pulling on clamp handle. (QA)

c. If installing 472995-411 transmitter in place of 472995-311, two washers (10, configuration X) may be added between lug and screw (8), two washers (11) between lug and screw (7), and one washer (12) between lug and screw (9) to make sure terminal lug is tight.

d. Connect wires to terminals. Torque screw (8) to 7 inch-pounds, screw (7) to 12 inch-pounds, and screw (9) to 16 inch-pounds. (QA)

e. Install no. 1 fuel tank access cover (WP004 00).

f. Connect utility and emergency battery connectors (WP013 00).

g. Remove no power tag from external power receptacle.

h. Refuel aircraft using external electrical power (A1-F18AC-PCM-000).

i. Set cockpit FUEL QTY selector to TRANS and check for correct no. 1 fuel tank fuel quantity (figure 1) on LEFT counter.

4. INSTALLATION - AFT TRANSMITTER.

a. Prepare mating surfaces of transmitter (4 or 6, figure 2, detail A) and access cover for electrical bonding (A1-F18AC-LMM-000).



To prevent damage to seal, which requires replacement of access cover, be careful when installing transmitter.

b. On 161354 THRU 161360, BEFORE F/A-18 AFC 39, install transmitter (6) with arrow pointing FWD, and install bolts and washers. Torque bolts 50 to 70 inch-pounds. (QA)

c. On 161704 AND UP; ALSO 161354 THRU 161360 AFTER F/A-18 AFC 39, position transmitter (4) with arrow pointing FWD and connect wires with screws (7, 8, and 9) to transmitter terminal block and torque as listed below: (QA)

(1) Torque screw (9) to 7 inch-pounds.

(2) Torque screw (7) to 12 inch-pounds.

(3) Torque screw (8) to 16 inch-pounds.

d. On 161704 AND UP; ALSO 161354 THRU 161360 AFTER F/A-18 AFC 39, install transmitter (4), bolts and washers. Torque bolts 50 to 70 inch-pounds. (QA)

e. Connect connector (1, figure 2).

f. Remove no power tag from external power receptacle.

g. Refuel aircraft using external electrical power (A1-F18AC-PCM-000).

h. Set cockpit FUEL QTY selector to TRANS and check for correct no. 1 fuel tank fuel quantity (figure 1) on LEFT counter.

i. Install internal door CPJ (A1-F18AC-LMM-010).

j. Install canopy (A1-F18AC-120-300, WP086 00).

5. ILLUSTRATED PARTS BREAKDOWN.

6. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

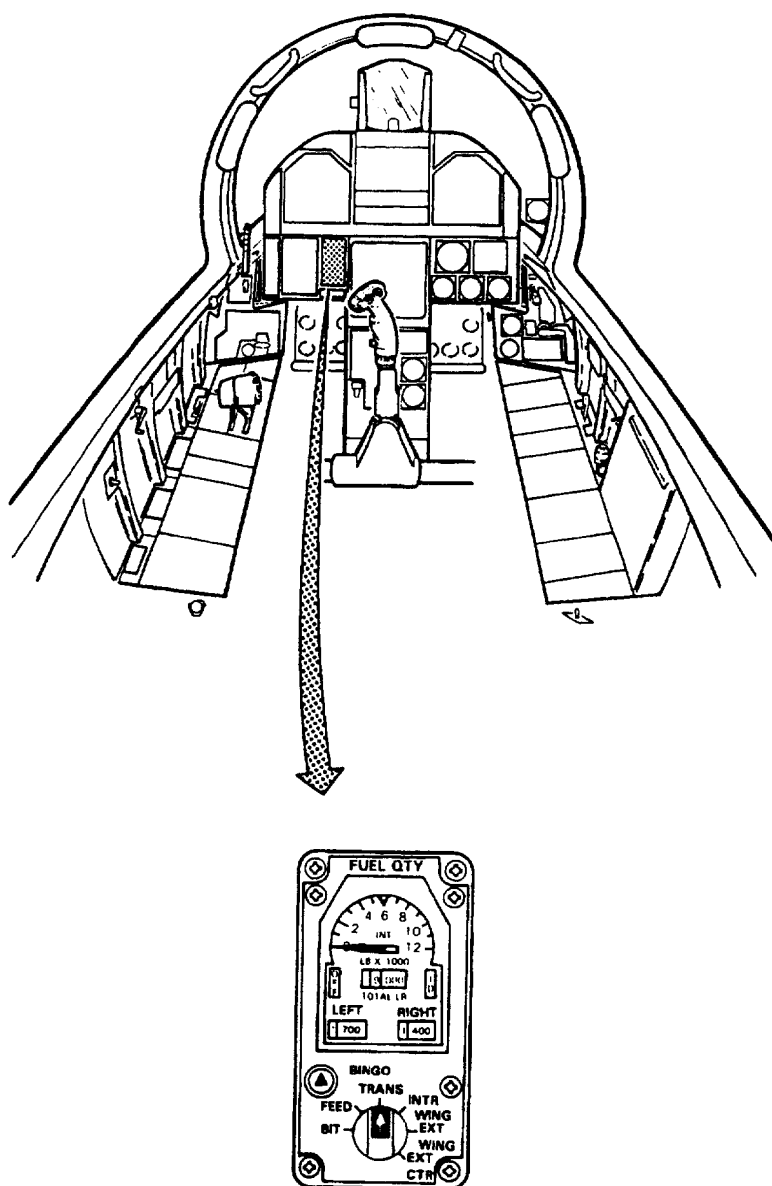


Figure 1. No. 1 Fuel Tank Forward Fuel Quantity Transmitter (5A-E028) (Sheet 1)

1640001A

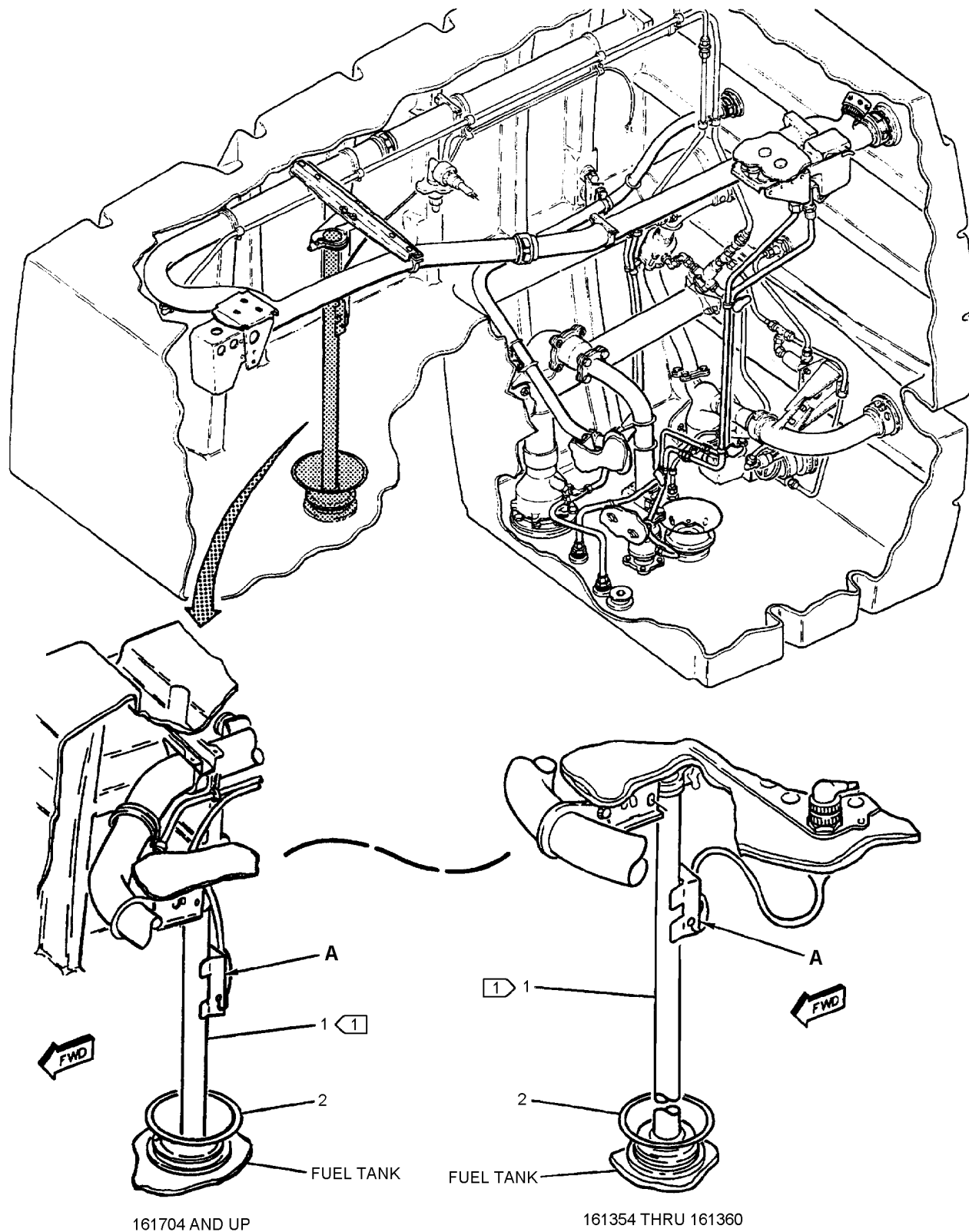
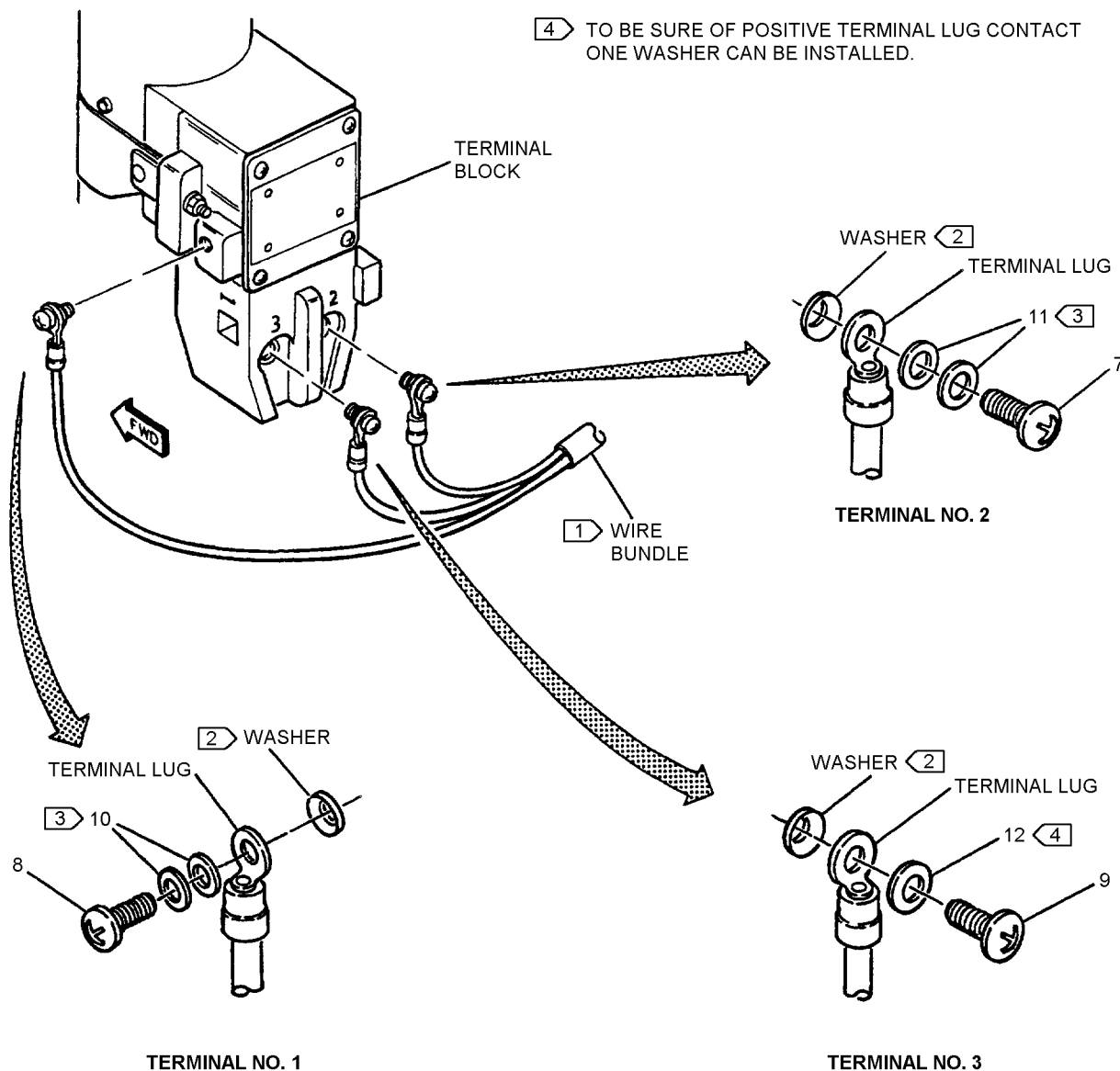


Figure 1. No. 1 Fuel Tank Forward Fuel Quantity Transmitter (5A-E028) (Sheet 2)

LEGEND

- 1 TO LOCATE WIRE TERMINAL REPAIR INFORMATION IN A1-F18AC-WRM-000 USE WRA REFERENCE DESIGNATOR AND TERMINAL NUMBER.
- 2 CONCAVE SIDE OF WASHER FACES TERMINAL LUG.
- 3 TO BE SURE OF POSITIVE TERMINAL LUG CONTACT TWO WASHERS MAXIMUM CAN BE INSTALLED.
- 4 TO BE SURE OF POSITIVE TERMINAL LUG CONTACT ONE WASHER CAN BE INSTALLED.



472995-411
CONFIGURATION X

Figure 1. No. 1 Fuel Tank Forward Fuel Quantity Transmitter (5A-E028) (Sheet 4)

1640001D

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 1 FUEL TANK FORWARD FUEL			
		QUANTITY TRANSMITTER (5A-E028)			
1	472995-411	. TRANSMITTER, LIQUID QUANTITY TANK	1		PAOZZ
		NO. 1, FORWARD (NO. 1 FUEL TANK FORWARD FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-223) (5A-E028)			
	472995-311	. SEE ABOVE	1	*	PAOZZ
2	74A582073-2001	. SUPPORT, TRANSMITTER (76301)	1		PAOZZ
	74A582062-2001	. SEE ABOVE	1	*	PAOZZ
	NAS673V2	. BOLT (AP)	3		PAOZZ
	AN960JD10L	. WASHER (AP)	3		PAOZZ
3	7C85-24-1AA	. CLAMP, QUICK RELEASE (71286)	1		PAOZZ
		(MCDONNELL SPEC ST9M427W24A)			
	7C34-24-2A	. SEE ABOVE (MCDONNELL SPEC	1	*	PAOZZ
		ST9M427W24)			
4	NAS663V2HT	. SCREW	1		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 4)	1		PAOZZ
5	NAS673V2	. BOLT	1		PAOZZ
	AN960JD10L	. WASHER (USE WITH INDEX 5)	1		PAOZZ
6	74A753324-9AAA	. CABLE ASSEMBLY, ELECTRICAL -	1	A	XBOOO
		FORWARD FUSELAGE (W53324) (76301) (FOR REPAIR SEE A1-F18AC-WRM-000)			
	74A753324-9BAA	. CABLE ASSEMBLY, ELECTRICAL	1	B	XBOOO
		FORWARD FUSELAGE (W53324) (76301) (FOR REPAIR SEE A1-F18AC-WRM-000)			
7	466604-008	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(89305) (MCDONNELL SPEC ST3M560-5)			
	MA3560-5	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(58845) (MCDONNELL SPEC ST3M560-5)			
	1AM121070-5	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-5	. SEE ABOVE (58998)	1	*	PAOZZ
	396648	. WASHER, CONICAL (89305) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-08) (UNDER LUG) (USE WITH INDEX 7)			
	448-3-2	. WASHER, CONICAL (86968) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-08) (UNDER LUG) (USE WITH INDEX 7)			
8	466604-006	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(89305) (MCDONNELL SPEC ST3M560-4)			
	MA3560-4	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(58845) (MCDONNELL SPEC ST3M560-4)			
	1AM121070-4	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-4	. SEE ABOVE (58998)	1	*	PAOZZ
	396973	. WASHER, CONICAL (89305) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-06) (UNDER LUG) (USE WITH INDEX 8)			
	448-3-1	. WASHER, CONICAL (86968) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-06) (UNDER LUG) (USE WITH INDEX 8)			
9	466604-010	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(89305) (MCDONNELL SPEC ST3M560-6)			
	MA3560-6	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(58845) (MCDONNELL SPEC ST3M560-6)			
	1AM121070-6	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-6	. SEE ABOVE (58998)	1	*	PAOZZ
	396974	. WASHER, CONICAL (89305) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-3) (UNDER LUG) (USE WITH INDEX 9)			

Figure 1. No. 1 Fuel Tank Forward Fuel Quantity Transmitter (5A-E028) (Sheet 5)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
	448-3-3	.							1	*	PAOZZ
10	AN960C8 +	.							2		PAOZZ
11	NAS620C6 +	.							2		PAOZZ
12	AN960C10L +	.							1		PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

+ USE WITH 472995-411

CODE	USABLE ON	MODEL
A	161354 THRU 161360	F/A-18B
B	161704 & UP	F/A-18B

Figure 1. No. 1 Fuel Tank Forward Fuel Quantity Transmitter (5A-E028) (Sheet 6)

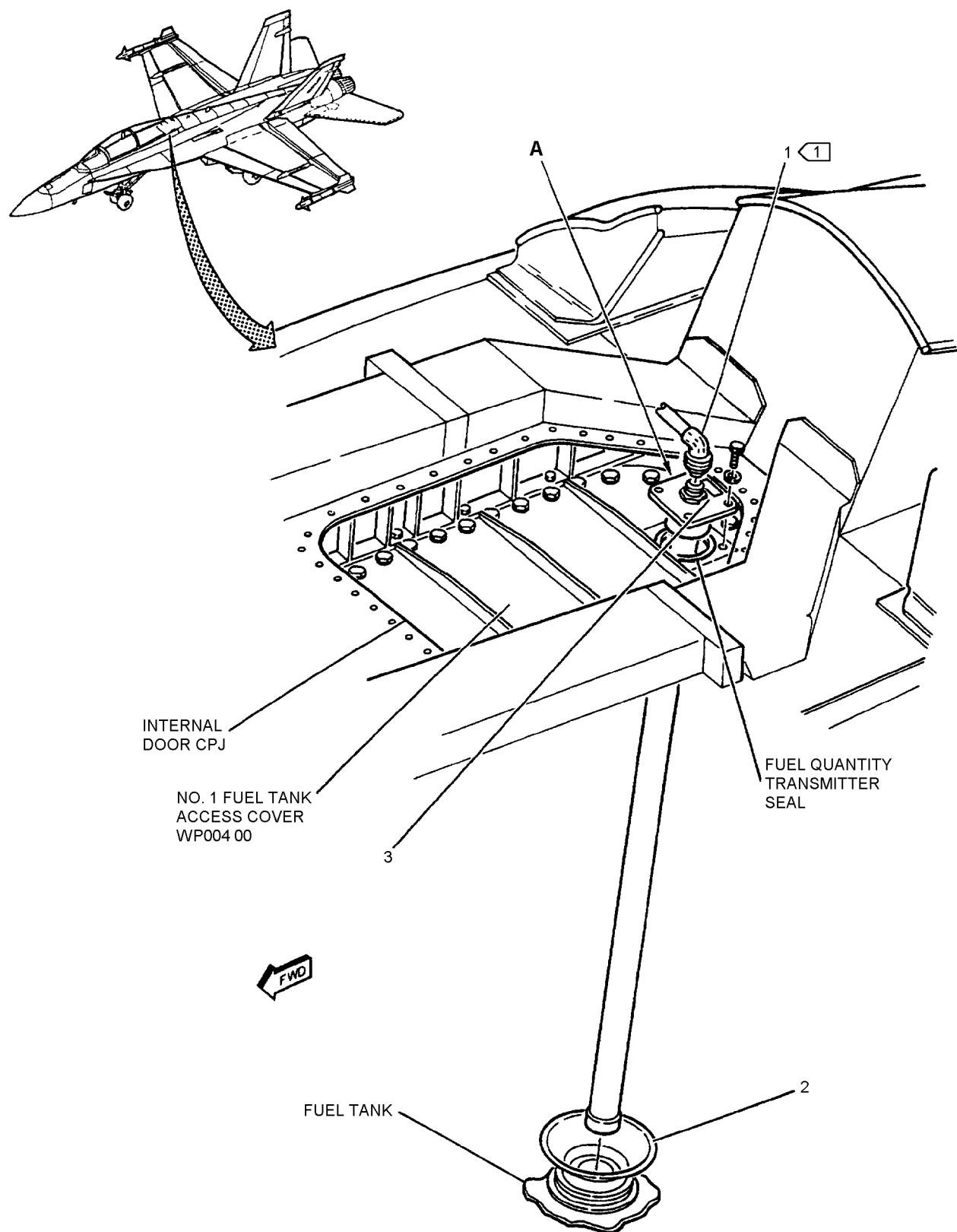


Figure 2. No. 1 Fuel Tank Aft Fuel Quantity Transmitter (5A-F029) (Sheet 1)

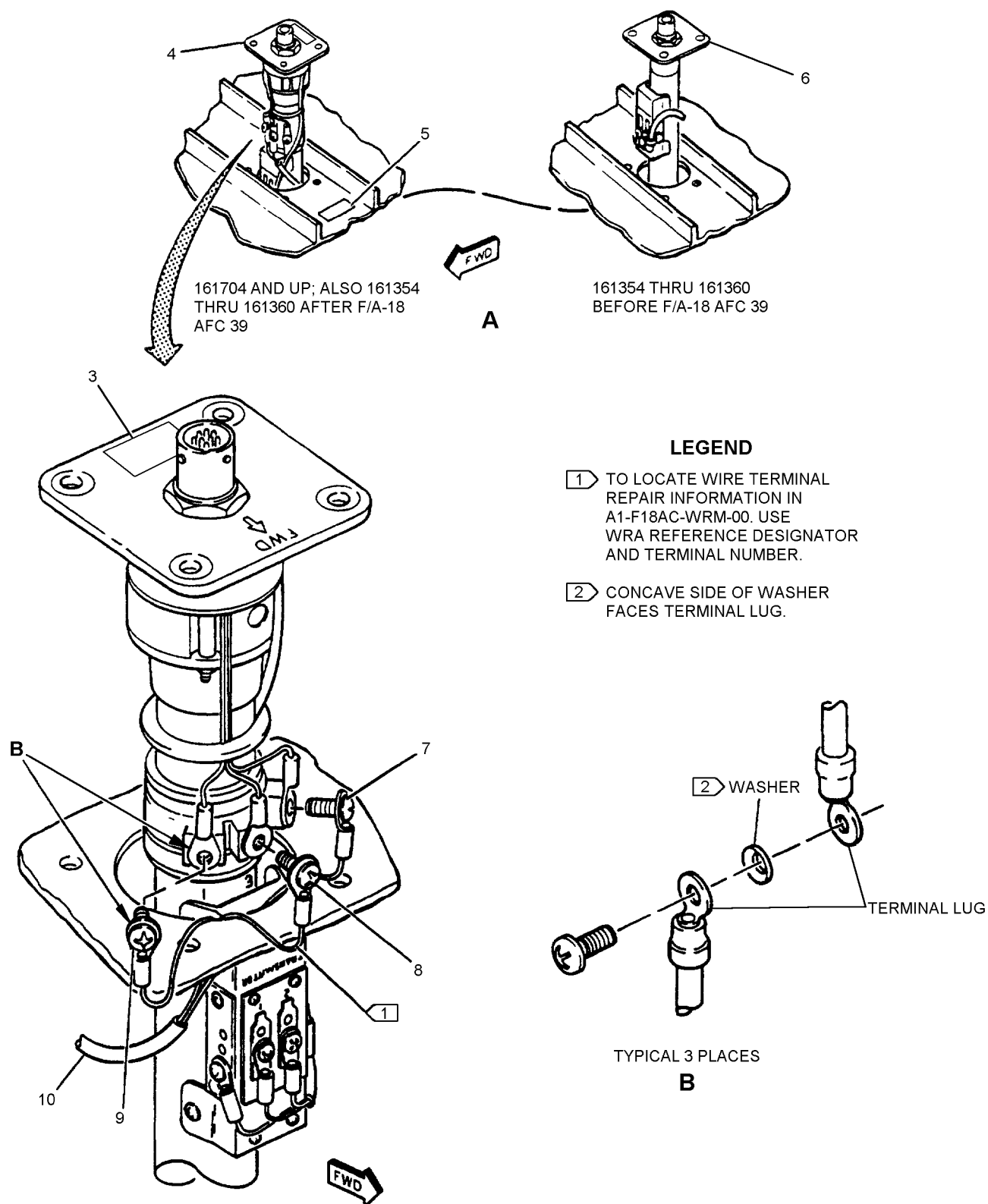


Figure 2. No. 1 Fuel Tank Aft Fuel Quantity Transmitter (5A-F029) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 1 FUEL TANK AFT FUEL QUANTITY			
		TRANSMITTER (5A-F029)			
1	MS27467T9B35S	. CONNECTOR, PLUG (SP-F029)	1		PAOZZ
2	74A582073-2003	. SUPPORT, TRANSMITTER (76301)	1		PAOZZ
	74A582062-2003	. SEE ABOVE	1	*	PAOZZ
3	74A890601-2326	. PLATE, IDENTIFICATION (76301)	1		MDOZZ
4	472995-612	. TRANSMITTER, LIQUID QUANTITY, TANK	1	A	PAOZZ
		NO. 1, AFT (NO. 1 AFT FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-225) (5A-F029)			
	472995-512	. SEE ABOVE	1	A*	PAOZZ
	472995-412	. SEE ABOVE	1	A*	PAOZZ
	NAS674V5	. BOLT (AP)	4		PAOZZ
	AN960JD416	. WASHER (AP)	4		PAOZZ
5	74R890003-2001	. MARKER, INSTRUCTIONAL (76301)	1	C	MDOZZ
6	472995-312	. TRANSMITTER, LIQUID QUANTITY TANK	1	B	PAOZZ
		NO. 1, AFT (NO. 1 FUEL TANK, AFT FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-225) (5A-E029)			
	NAS674V5	. BOLT (AP)	4		PAOZZ
	AN960JD416	. WASHER (AP)	4		PAOZZ
7	466604-008	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(89305) (MCDONNELL SPEC ST3M560-5)			
	MA3560-5	. SEE ABOVE (58845)	1	*	PAOZZ
	1AM121070-5	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-5	. SEE ABOVE (58998)	1	*	PAOZZ
	396648	. WASHER, CONICAL (89305) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-08) (USE WITH INDEX 7)			
	448-3-2	. SEE ABOVE (86968)	1	*	PAOZZ
8	466604-010	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(89305) (MCDONNELL SPEC ST3M560-6)			
	MA3560-6	. SEE ABOVE (58845)	1	*	PAOZZ
	1AM121070-6	. SEE ABOVE (58251)	1	A*	PAOZZ
	FIT7043-6	. SEE ABOVE (58998)	1	*	PAOZZ
	396974	. WASHER, CONICAL (89305) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-3) (USE WITH INDEX 8)			
	448-3-3	. SEE ABOVE (86968)	1	*	PAOZZ
9	466604-006	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(89305) (MCDONNELL SPEC ST3M560-4)			
	MA3560-4	. SEE ABOVE (58845)	1	*	PAOZZ
	1AM121070-4	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-4	. SEE ABOVE (58998)	1	*	PAOZZ
	396973	. WASHER, CONICAL (89305) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-06) (USE WITH INDEX 9)			
	448-3-1	. SEE ABOVE (86968)	1	*	PAOZZ
10	74A753324-9BAA	. CABLE ASSEMBLY, ELECTRICAL - FWD	1		XBOOO
		FUSELAGE W53324 (76301) (FOR WIRING REPAIR SEE A1-F18AC-WRM-000)			

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

Figure 2. No. 1 Fuel Tank Aft Fuel Quantity Transmitter (5A-F029) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

CODE	USABLE ON	MODEL
A	161704 & UP; ALSO 161354 THRU 161360 AFTER F/A-18 AFC 39	F/A-18B
B	161354 THRU 161360 BEFORE F/A-18 AFC 39	F/A-18B
C	161354 THRU 161360 AFTER F/A-18 AFC 39	F/A-18B

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
NO. 2 FUEL TANK FUEL QUANTITY TRANSMITTER (5A-R030)
FUEL QUANTITY SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captain Manual	A1-F18AC-PCM-000

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Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 18	-	Incorporation of Fuel Turbine Boost Pump/ Sealing of Raised Baffle in Fuel Tanks 2 and 3 (ECP MDA-F/A-18-00077C1/C2)	15 Jul 86	-
F/A-18 AFC 53	-	Elimination of Tanks 1 and 4 Sneak Circuit, Tank 4 Motive Flow Shut Off Valve, and Raised Inverted Baffle (ECP MDA-F/ A-18-00055/C1)	15 Jul 86	-

Support Equipment Required

Nomenclature	Part Number or Type Designation
--------------	------------------------------------

Torque Wrench, 0 to 120 Inch-Pounds	-
---	---

Materials Required

None

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Make sure electrical power is off (A1-F18AC-LMM-000).
- c. Remove door 26 (A1-F18AC-LMM-010).
- d. Disconnect connector (1, figure 1, sheet 2) from transmitter (2).



To prevent damage to seal, which requires replacement of access cover, be careful when removing transmitter.

- e. Remove transmitter (2) and attaching parts.

2. INSTALLATION.

- a. Make sure electrical power is off (A1-F18AC-LMM-000).
- b. Prepare mating surfaces of transmitter (2, figure 1, sheet 2) and access cover for electrical bonding (A1-F18AC-LMM-000).



To prevent damage to transmitter, make sure arrow on transmitter faces forward.

To prevent damage to seal, which requires replacement of access cover, be careful when installing transmitter.

- c. Install transmitter (2) and attaching parts. Torque bolts 50 to 70 inch-pounds. (QA)
- d. Connect connector (1) to transmitter (2).
- e. Remove no power tag from external power receptacle.
- f. Refuel aircraft using external electrical power (A1-F18AC-PCM-000), if required.
- g. On cockpit FUEL QTY indicator, set selector to FEED and look for correct no. 2 tank fuel quantity.
- h. Install door 26 (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

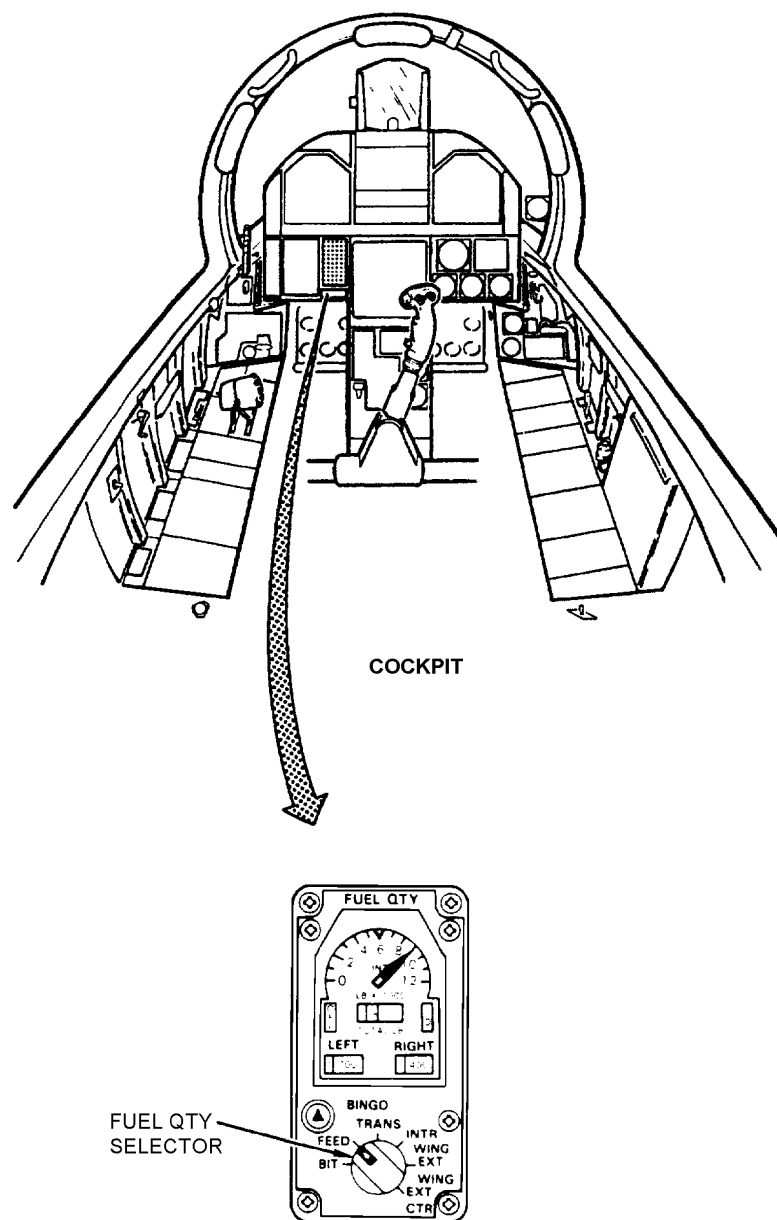


Figure 1. No. 2 Fuel Tank Fuel Quantity Transmitter (5A-R030) (Sheet 1)

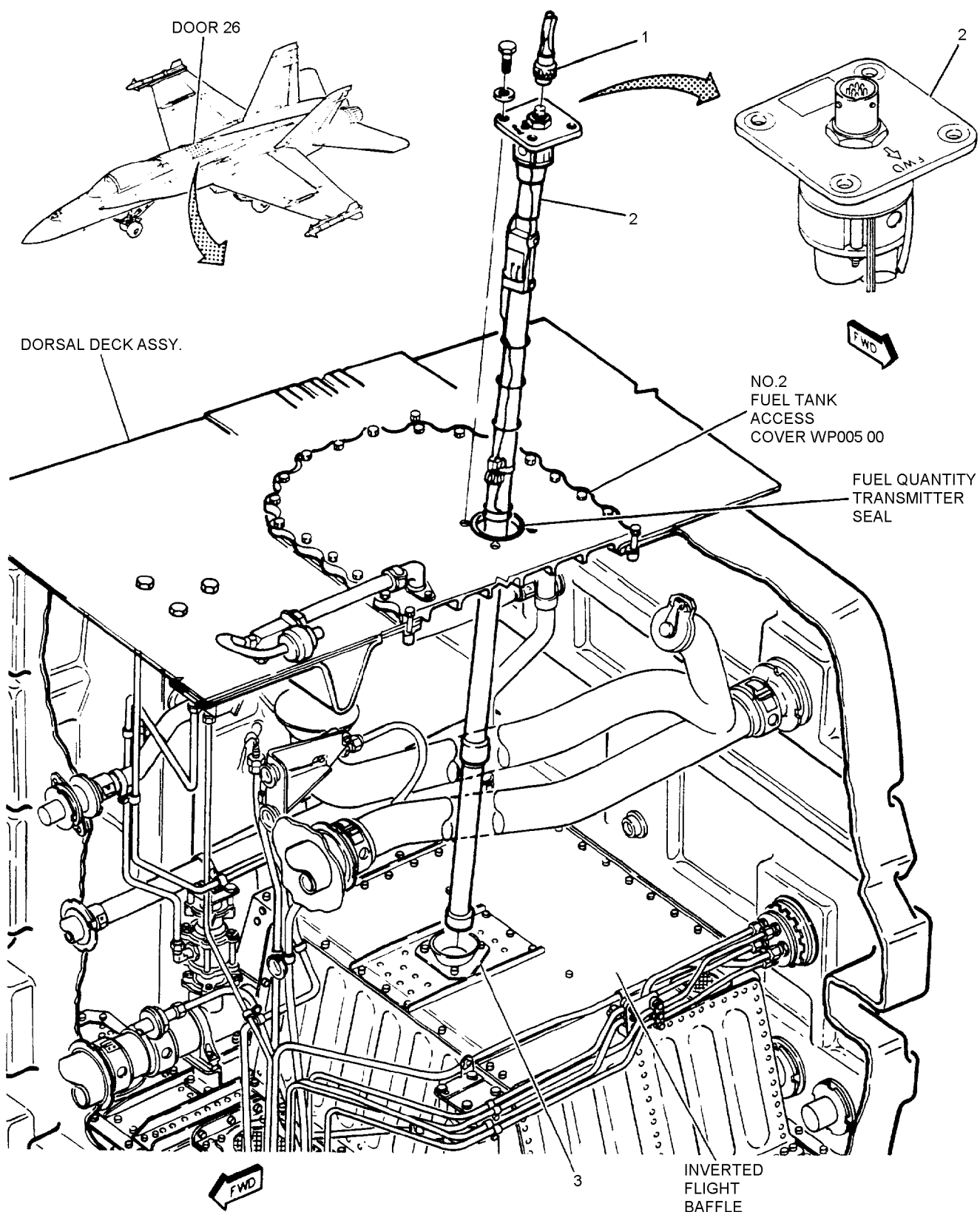


Figure 1. No. 2 Fuel Tank Fuel Quantity Transmitter (5A-R030) (Sheet 2)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		NO. 2 FUEL TANK FUEL QUANTITY									
		TRANSMITTER (5A-R030)									
1	MS27467T11B35S	.	CONNECTOR, PLUG (5P-R030)					1		PAOZZ	
2	472995-303	.	TRANSMITTER, LIQUID QUANTITY, TANK					1	A	PAOZZ	
		NO. 2 (NO. 2 FUEL TANK FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-209) (5A-R030)									
	472995-503	.	TRANSMITTER, LIQUID QUANTITY TANK					1	B	PAOZZ	
		NO. 2 (NO. 2 FUEL TANK FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-259) (5A-R030) (REPLACES 472995-403)									
	472995-403	.	TRANSMITTER, LIQUID QUANTITY TANK					1	C	PAOZZ	
		NO. 2 (NO. 2 FUEL TANK FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-259) (5A-R030) (USE UNTIL EXHAUSTED)									
	NAS674V8	.	BOLT (AP)					4		PAOZZ	
	AN960JD416L	.	WASHER (AP)					4		PAOZZ	
3	74A586297-2001	.	GUIDE, PROBE - FUEL QUANTITY TANK					1		XBOZZ	
		2 & 3 (76301)									

CODE	USABLE ON	MODEL
A	161353 THRU 161715	F/A-18A/B
B	162395 & UP: ALSO 161353 THRU 161715 AFTER F/A-18 AFC 018 AND F/A-18 AFC 053	F/A-18A/B
C	161716 THRU 161987	F/A-18A/B

Figure 1. No. 2 Fuel Tank Fuel Quantity Transmitter (5A-R030) (Sheet 3)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 3 FUEL TANK FUEL QUANTITY TRANSMITTER (5A-R031)

FUEL QUANTITY SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captain Manual	A1-F18AC-PCM-000

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 18	-	Incorporation of Fuel Turbine Boost Pump/ Sealing of Raised Baffle in Tank 2 and 3 (ECP- MDA-F/A-18-00077/C1/C2)	15 Jul 86	-

Support Equipment Required

Nomenclature	Part Number or Type Designation
Torque Wrench, 0 to 120 Inch-Pounds	-

Materials Required

None

1. REMOVAL.

a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).

b. Observe applicable fuel tank maintenance precautions (WP013 00).

c. Remove door 31 (A1-F18AC-LMM-010).

d. Disconnect connector (1, figure 1, sheet 2) from transmitter (2).



To prevent damage to seal, which requires replacement of access cover, be careful when removing transmitter.

e. Remove bolts, washers, and transmitter (2).

2. INSTALLATION.**NOTE**

Make sure corrosion prevention of fasteners and attaching parts is done during installation (A1-F18AC-LMM-000).

a. Make sure hydraulic and electrical power are off (A1-F18AC-LMM-000).

b. Prepare mating surfaces of transmitter (2, figure 1, sheet 2) and access cover for electrical bonding (A1-F18AC-LMM-000).



To prevent damage to transmitter (2), make sure transmitter is installed with arrow pointing FWD.

To prevent damage to seal, which requires replacement of access cover, be careful when installing transmitter.

c. Install transmitter (2), bolts, and washers. Torque bolts 50 to 70 inch-pounds.

d. Connect connector (1) to transmitter (2).

e. Refuel aircraft using external electrical power (A1-F18AC-PCM-000).

f. Set cockpit FUEL QTY selector to FEED and look for correct no. 3 fuel tank fuel quantity (figure 1).

g. Install door 31 (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

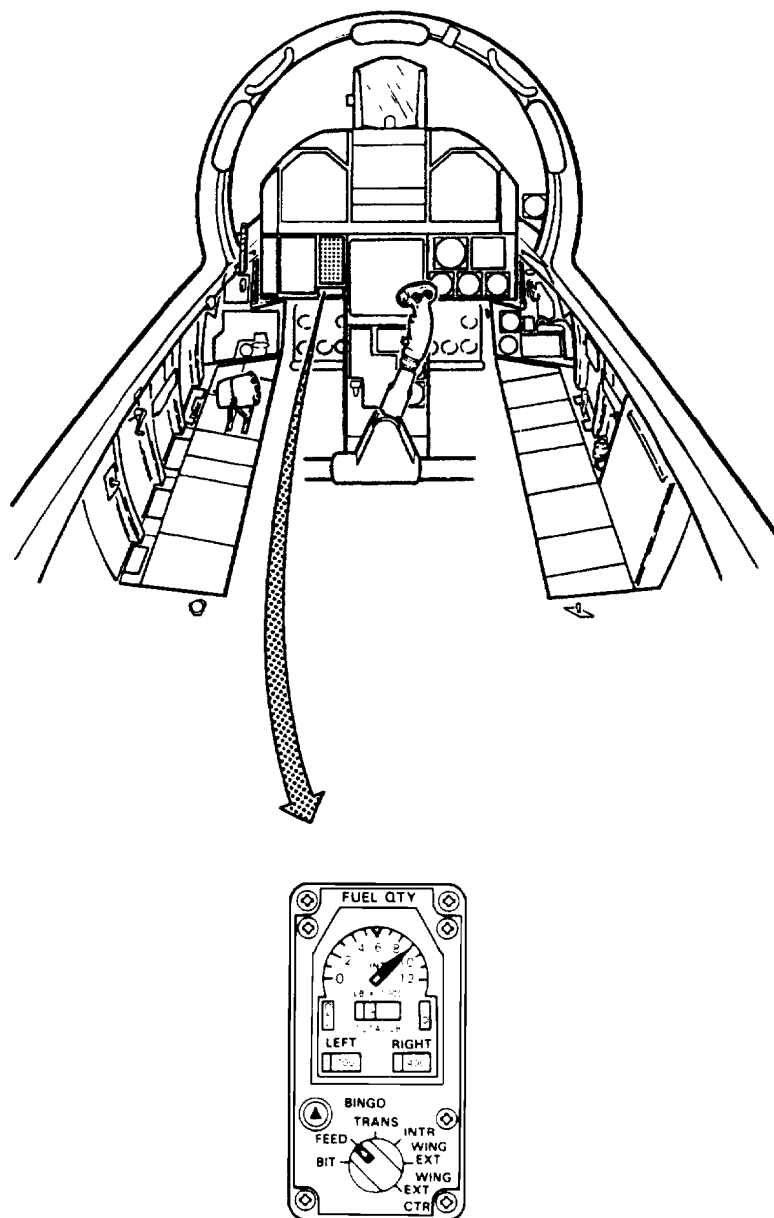


Figure 1. No. 3 Fuel Tank Fuel Quantity Transmitter (5A-R031) (Sheet 1)

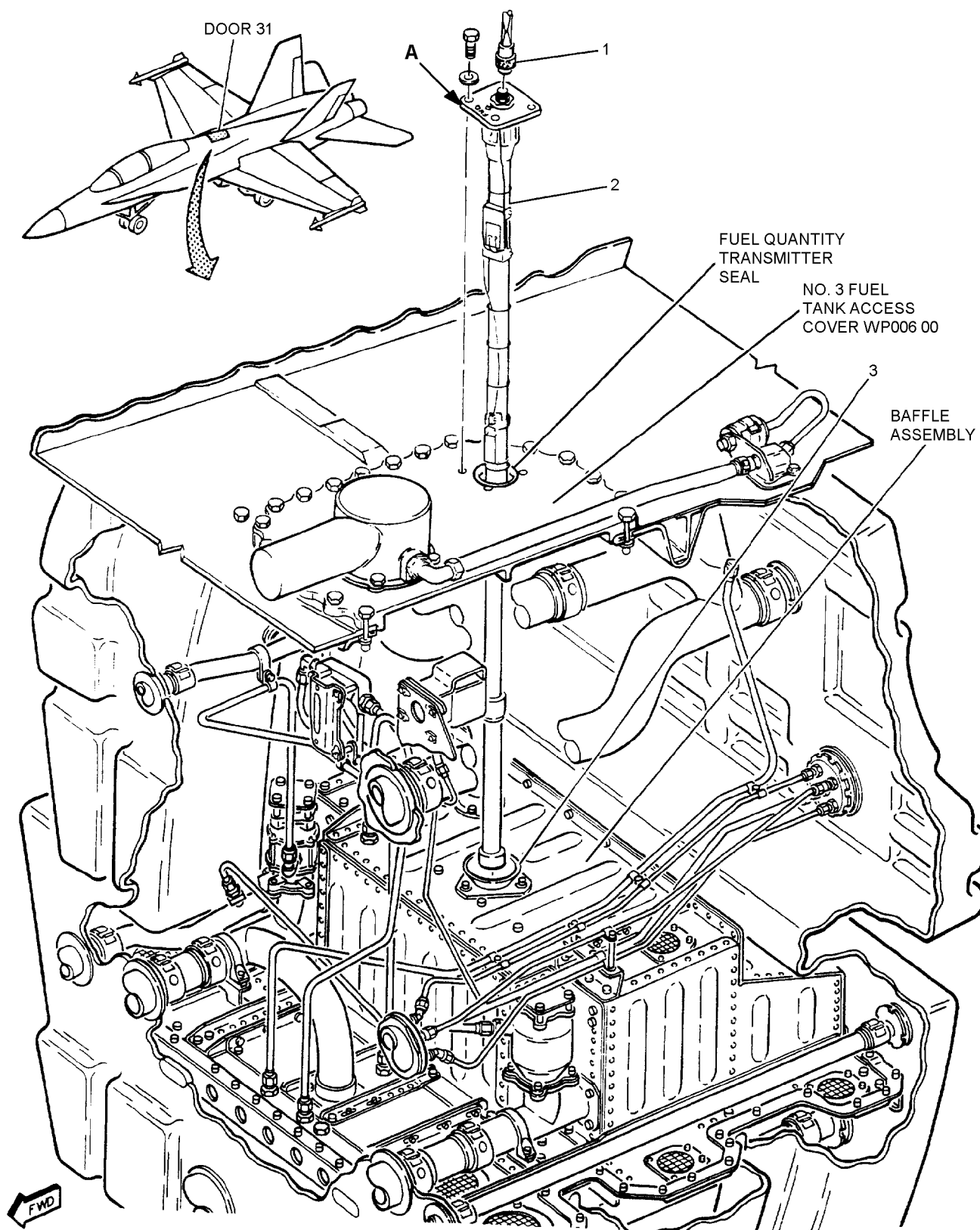
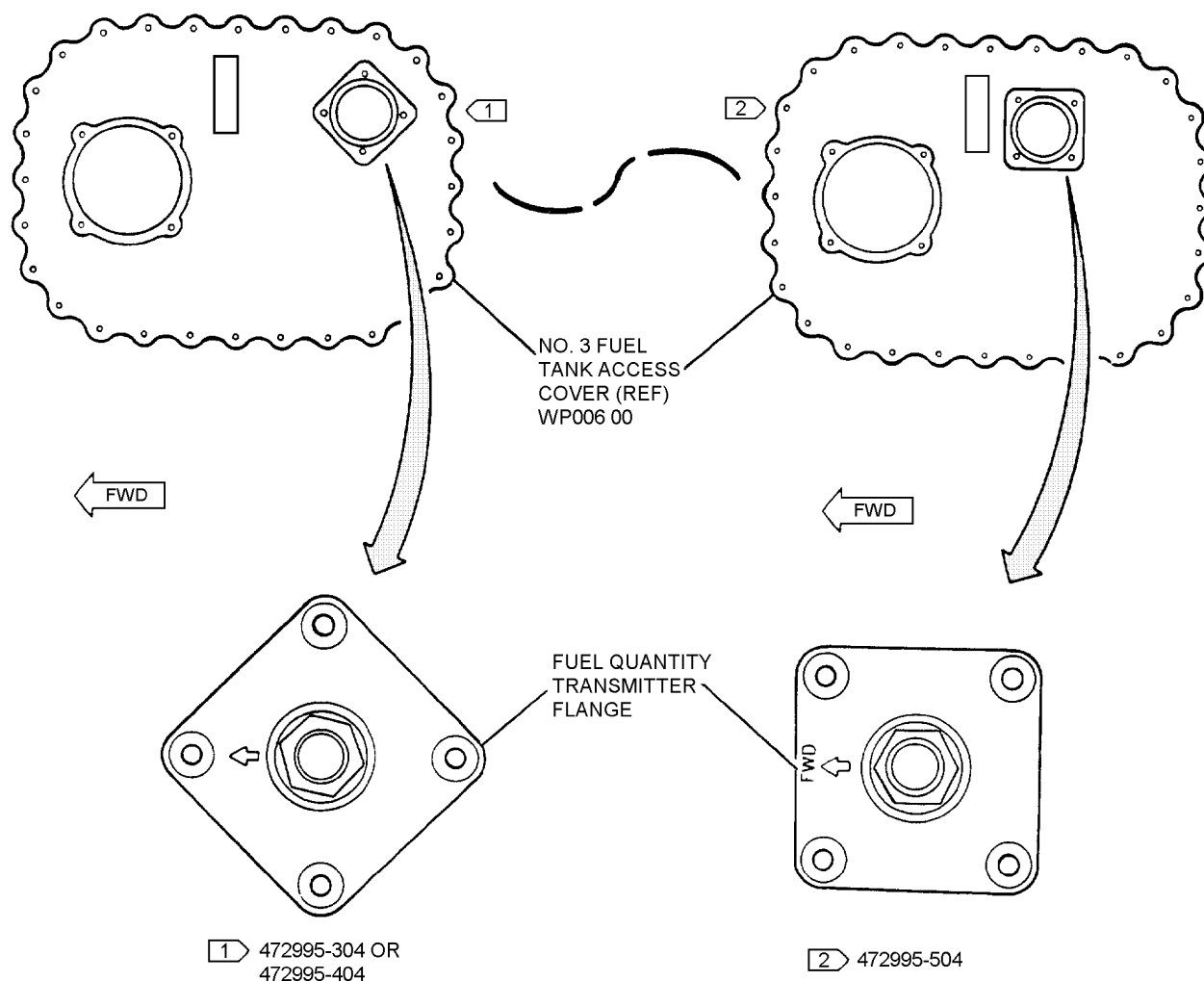


Figure 1. No. 3 Fuel Tank Fuel Quantity Transmitter (5A-R031) (Sheet 2)



A

LEGEND

- 1 161353 THRU 161761 BEFORE F/A-18 AFC 18 AND F/A-18 AFC 53.
- 2 161924 AND UP; ALSO 161353 THRU 161761 AFTER F/A-18 AFC 18 AND F/A-18 AFC 53.
- 3. TRANSMITTERS 472995-304 AND 472995-404 HAVE FLANGES SET AT DIFFERENT ANGLE THAN TRANSMITTER 472995-504 AND ARE NOT INTERCHANGEABLE BECAUSE OF DIFFERENCES IN EQUIPMENT INSTALLED INSIDE TANK.

Figure 1. No. 3 Fuel Tank Fuel Quantity Transmitter (5A-R031) (Sheet 3)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		NO. 3 FUEL TANK FUEL QUANTITY									
		TRANSMITTER (5A-R031)									
1	MS27467T11B35S	.							1		PAOZZ
2	472995-304	.							1	A	PAOZZ
		NO. 3 (NO. 3 FUEL TANK FUEL QUANTITY TRANSMITTER) (89305)									
		(MCDONNELL SPEC 74-580056-241)									
		(5A-R031)									
	472995-404	.							1	B	PAOZZ
		NO. 3 (NO. 3 FUEL TANK FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-261) (5A-R031)									
	472995-504	.							1	C	PAOZZ
		NO. 3 (NO. 3 FUEL TANK FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-261) (5A-R031)									
	NAS674V8	.							4		PAOZZ
	AN960JD416L	.							4		PAOZZ
3	74A586297-2001	.							1		XBOZZ
		GUIDE - PROBE, FUEL QUANTITY, TANK									
		NO. 3 (76301)									
		CODE	USABLE ON				MODEL				
		A	161353 THRU 161715 BEFORE F/A-18 AFC 18 AND F/A-18 AFC 53				F/A-18A/B				
		B	161716 THRU 161761 BEFORE F/A-18 AFC 18 AND F/A-18 AFC 53				F/A-18A/B				
		C	161924 & UP: ALSO 161353 THRU 161761 AFTER F/A-18 AFC 18 AND F/A-18 AFC 53				F/A-18A/B				

Figure 1. No. 3 Fuel Tank Fuel Quantity Transmitter (5A-R031) (Sheet 4)

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

NO. 4 FUEL TANK FUEL QUANTITY TRANSMITTERS (5A-R032, 5A-R033 OR 5A-R034)

FUEL QUANTITY SYSTEM

This work package supersedes WP167 00, dated 1 November 1997.

Reference Material

Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captain Manual	A1-F18AC-PCM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

Nomenclature	Part Number or Type Designation
Torque Wrench, 0 to 120 Inch-Pounds	-

Materials Required (Cont)

Nomenclature	Specification or Part Number
Petrolatum, Technical	VV-P-236 (CAGE 81348)

Materials Required

Nomenclature	Specification or Part Number
Packing	MS29513-228

1. REMOVAL.

- a. Do general preparation for removal (WP013 00).
- b. Remove door 40, 43, or 49 for access to transmitter (6, 9, or 11, figure 1, details A and B) (A1-F18AC-LMM-010).
- c. Disconnect connector (5, 8, or 10) from transmitter (6, 9, or 11).



Bleed air leak detector performance will be degraded if the detector sensing element is kinked or crushed. To avoid damaging the detector sensing element, do not form a bend radius of less than 0.5 inch.

d. Unfasten clamps (3 or 4, sheet 2) immediately forward and aft of transmitter (9 or 11, detail B).

e. Move detector (1, sheet 2) as required for access to transmitter (9 or 11, detail B).



To prevent damage to seal, which requires replacement of access cover, be careful when removing transmitter (6 or 9, details A and B).

f. Remove bolts, washers, and transmitter (6, 9, or 11).

g. On aft transmitter (11), remove packing (12).

2. INSTALLATION.

a. Do general preparation for installation (WP013 00).



The center transmitter can be installed in forward transmitter position resulting in transmitter being unsupported on the bottom. Fuel movement could bend or break transmitter.

b. If installing aft transmitter (11, figure 1, detail B), do substeps below:



Petrolatum

1

(1) Lubricate packing (12) with petrolatum.

(2) Install packing (12) on transmitter (11).

c. Prepare mating surfaces of transmitter (6, 9, or 11, details A and B) and access cover for electrical bonding (A1-F18AC-LMM-000).



Bleed air leak detector performance will be degraded if the detector sensing element is kinked or crushed. To avoid damaging the detector sensing element, do not form a bend of radius of less than 0.5 inch.

To prevent damage to transmitter, make sure arrow on transmitter faces forward.

d. Move detector (1, sheet 2) as required for installation of transmitter (9 or 11, detail B).



To prevent damage to seal which requires replacement of access cover, be careful when installing transmitter (6 or 9, details A and B).

e. Install transmitter (6, 9, or 11), bolts and washers. Torque bolts 50 to 70 inch-pounds. (QA)

f. Connect connector (5, 8, or 10) to transmitter (6, 9, or 11), respectively.

g. Position detector (1, sheet 2) and fasten clamps (3 or 4) immediately forward and aft of transmitter (9 or 11, detail B).

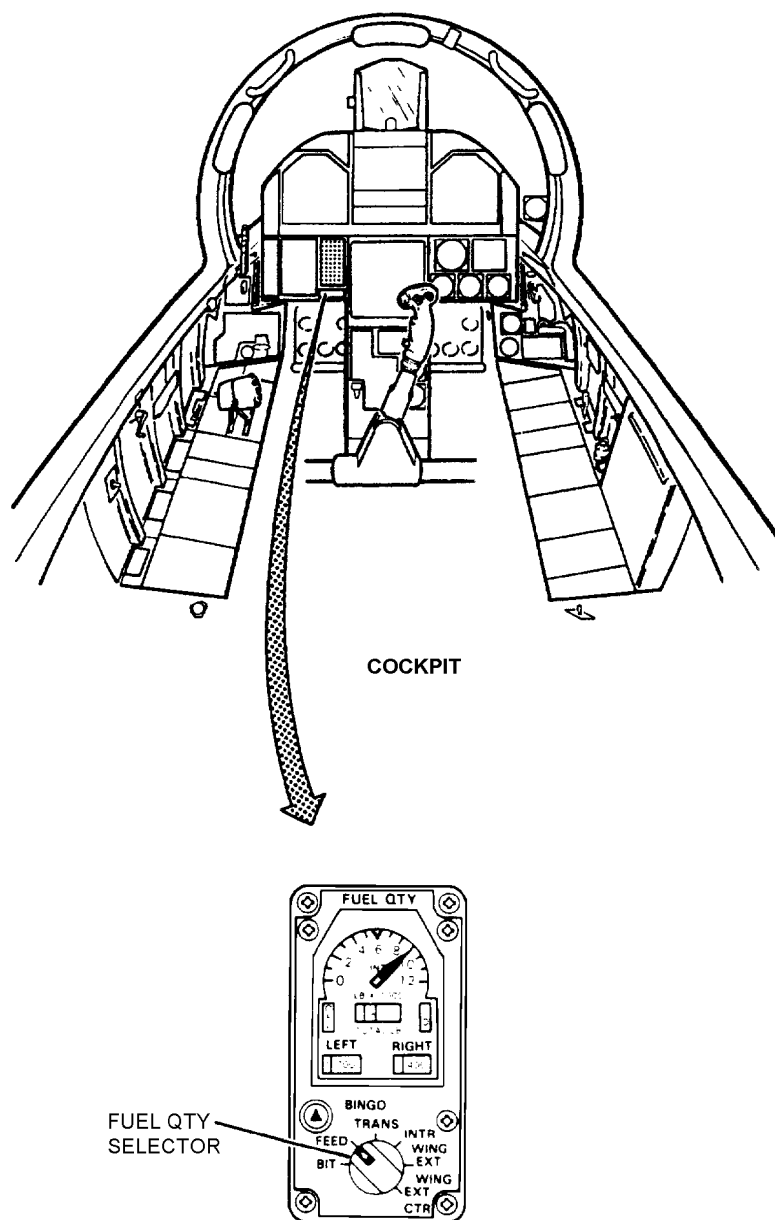
h. Refuel aircraft using external electrical power (A1-F18AC-PCM-000).

i. In cockpit, on FUEL QTY indicator, set selector to TRANS and look for correct no. 4 fuel tank fuel amount (figure 1).

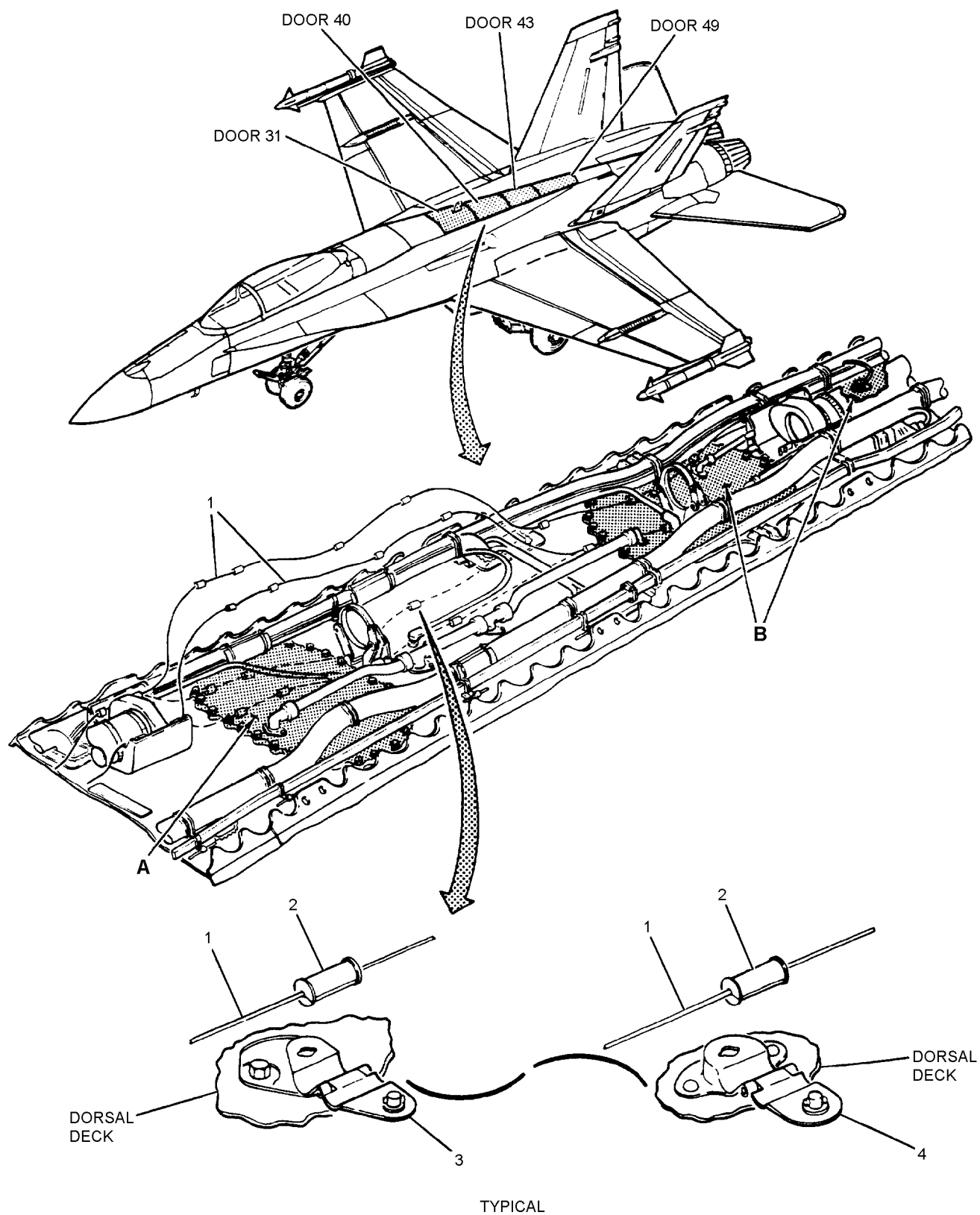
j. Install door 40, 43, or 49 (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.



**Figure 1. No. 4 Fuel Tank Quantity Transmitters
(5A-R032, 5A-R033 or 5A-R034) (Sheet 1)**



**Figure 1. No. 4 Fuel Tank Quantity Transmitters
(5A-R032, 5A-R033 or 5A-R034) (Sheet 2)**

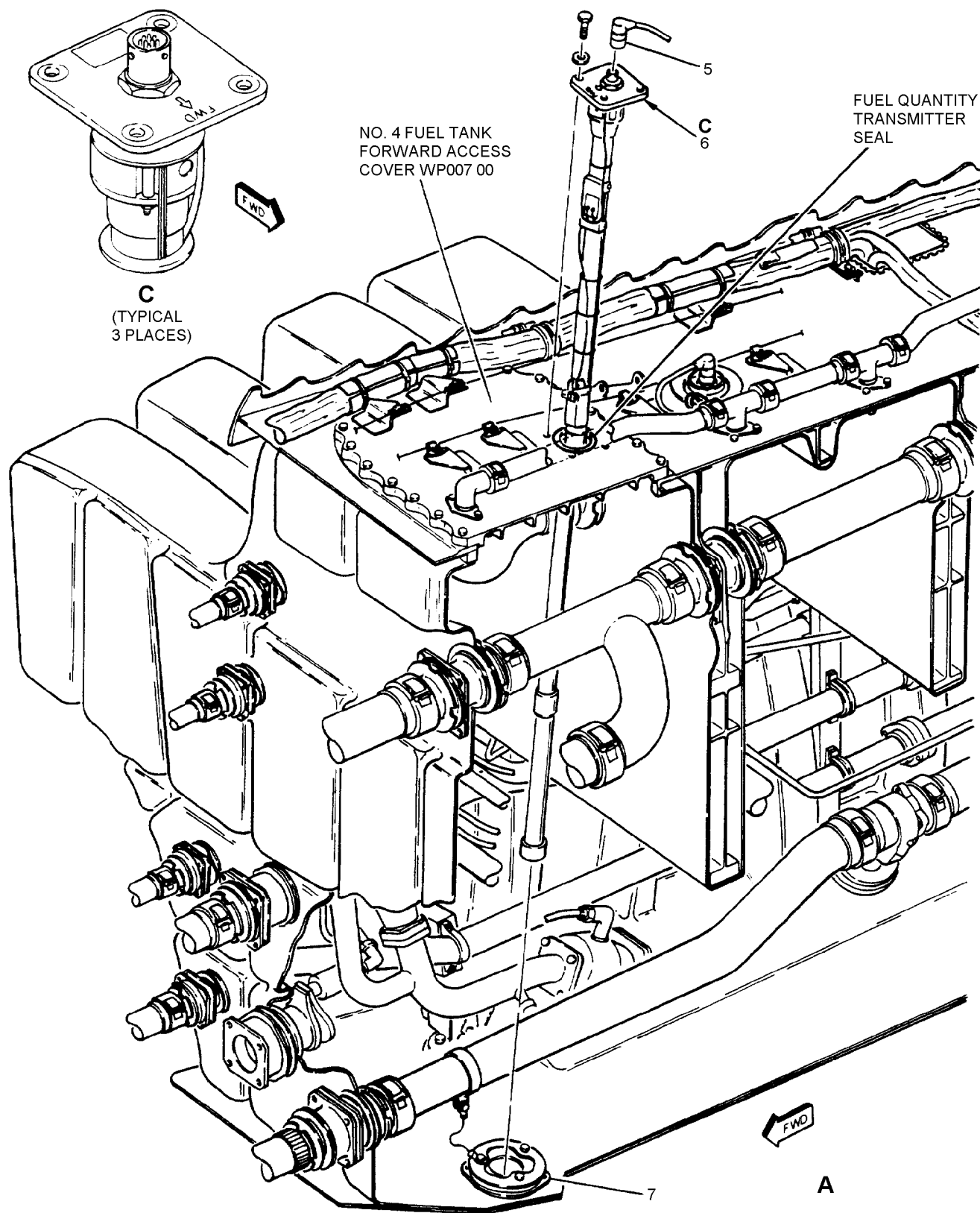


Figure 1. No. 4 Fuel Tank Quantity Transmitters
(5A-R032, 5A-R033 or 5A-R034) (Sheet 3)

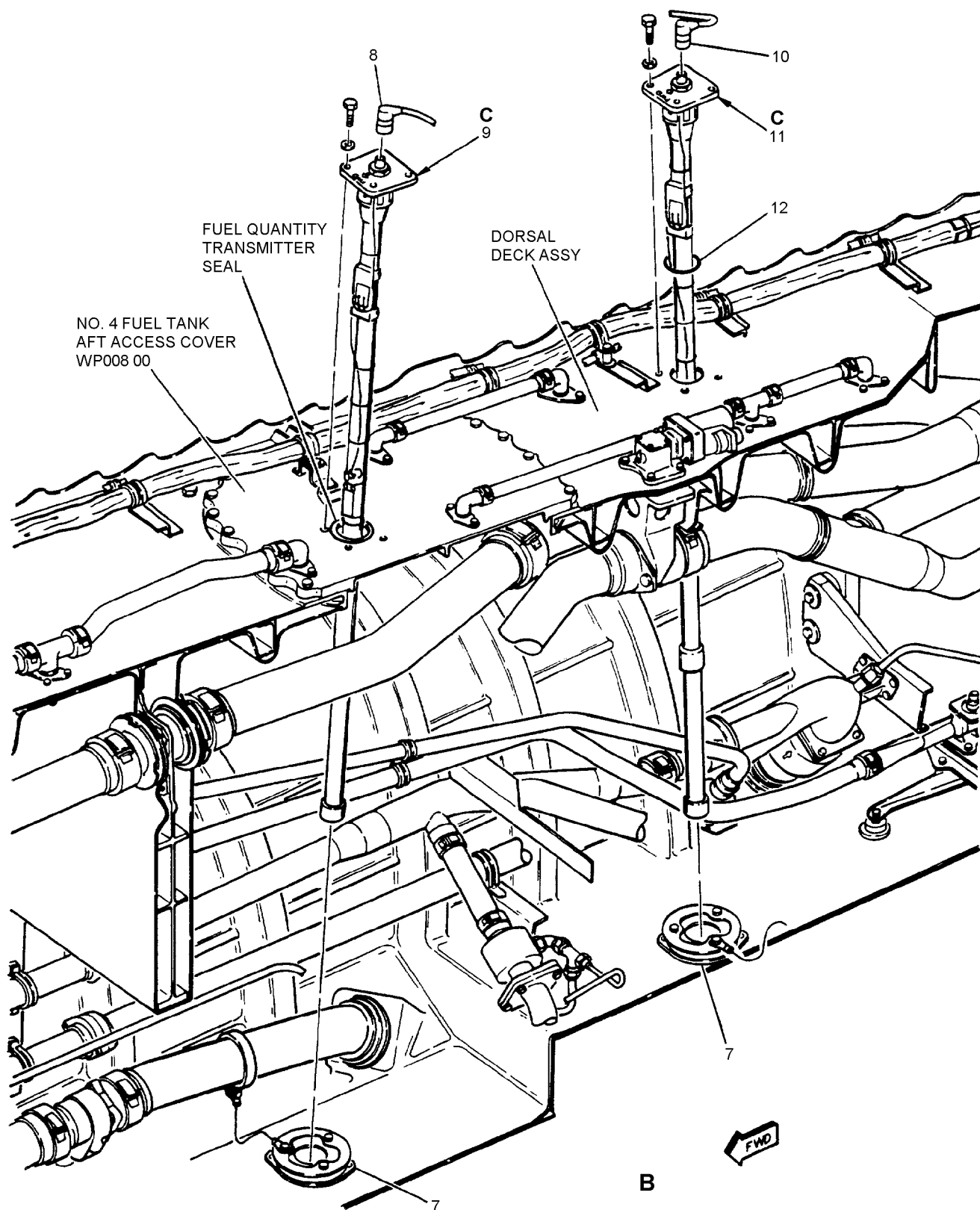


Figure 1. No. 4 Fuel Tank Quantity Transmitters (5A-R032, 5A-R033 or 5A-R034) (Sheet 4)

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
		NO. 4 FUEL TANK FUEL QUANTITY			
		TRANSMITTERS (5A-R032, 5A-R033 OR 5A-R034)			
1	3151-12-600/325-12	. DETECTOR, FIRE, OVERHEAT (DORSAL DECK) (BLEED AIR LEAK DETECTOR) (25693) (MCDONNELL SPEC 74-830075-245) (24U-P005 AND 24U-N006)	2		PAOZZ
2	3106	. ADAPTER, CLAMP - SENSOR, LEAK AND FIRE DETECTOR (25693) (MCDONNELL SPEC 9M774-1)	4		PAOZZ
3	7C1-4	. CLAMP, LOOP (71286) (MCDONNELL SPEC ST9M631S4)	AR		PAOZZ
4	7C31-1AA	. CLAMP, QUICK RELEASE (71286) (MCDONNELL SPEC ST9M632S4)	AR		PAOZZ
5	MS27467T9B35S	. CONNECTOR, PLUG (5P-R032)	1		PAOZZ
6	472995-405	. TRANSMITTER, LIQUID QUANTITY, TANK NO. 4, FORWARD (NO. 4 FUEL TANK FORWARD FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-213) (5A-R032) (REPLACES 472995-305)	1		PAOZZ
	472995-305	. TRANSMITTER, LIQUID QUANTITY TANK NO. 4, FORWARD (NO. 4 FUEL TANK FORWARD FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-213) (5A-R032) (USE UNTIL EXHAUSTED)	1	A	PAOZZ
	NAS674V6	. BOLT (AP)	4		PAOZZ
	AN960JD416L	. WASHER (AP)	4		PAOZZ
7	74A586880-2001	. PLATE, RETAINER - PROBE GUIDE, FUEL QUANTITY (76301)	3		PAOZZ
8	MS27467T9B35S	. CONNECTOR, PLUG (5P-R033)	1		PAOZZ
9	472995-406	. TRANSMITTER, LIQUID QUANTITY TANK NO. 4, CENTER (NO. 4 FUEL TANK CENTER FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-215) (5A-R033) (REPLACES 472995-306)	1		PAOZZ
	472995-306	. TRANSMITTER, LIQUID QUANTITY, TANK NO. 4, CENTER (NO. 4 FUEL TANK CENTER FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-215) (5A-R033) (USE UNTIL EXHAUSTED)	1	A	PAOZZ
	NAS674V6	. BOLT (AP)	4		PAOZZ
	AN960JD416L	. WASHER (AP)	4		PAOZZ
10	MS27467T9B35S	. CONNECTOR, PLUG (5P-R034)	1		PAOZZ
11	472995-407	. TRANSMITTER, LIQUID QUANTITY TANK NO. 4, AFT (NO. 4 FUEL TANK AFT FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-221) (5A-R034) (REPLACES 472995-307)	1		PAOZZ

Figure 1. No. 4 Fuel Tank Quantity Transmitters (5A-R032, 5A-R033 or 5A-R034) (Sheet 5)

CODE	USABLE ON	MODEL
A	161353 THRU 161987	F/A-18A/B

**Figure 1. No. 4 Fuel Tank Quantity Transmitters
(5A-R032, 5A-R033 or 5A-R034) (Sheet 6)**

ORGANIZATIONAL MAINTENANCE**SYSTEM MAINTENANCE WITH IPB****INBOARD WING FUEL QUANTITY TRANSMITTER (5A-U039 OR 5A-V043)****FUEL QUANTITY SYSTEM**

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Integrated Flight Controls	A1-F18AC-570-300
Leading Edge Flap and Servo Valve or Shaft or Connecting Link - 161353 THRU 161519 BEFORE F18 AFC 27	WP035 00
Leading Edge Flap and Servo Valve or Shaft or Connecting Link - 161353 THRU 161519 AFTER F18 AFC 27	WP036 01
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captain Manual	A1-F18AC-PCM-000

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Record of Applicable Technical Directives

None

Support Equipment Required

Nomenclature	Part Number or Type Designation
Torque Wrench, 0 to 25 Inch-Pounds	-
Torque Wrench, 0 to 120 Inch-Pounds	-
External Electrical Power Source	-

Materials Required

Nomenclature	Specification or Part Number
Packing (14)	NAS1523AA4H
Petrolatum, Technical	VV-P-236 (CAGE 81348)

1. REMOVAL.

a. Defuel wing per substeps below:

(1) Do or observe defueling precautions (A1-F18AC-PCM-000).

(2) Apply external electrical power (A1-F18AC-LMM-000).

(3) On cockpit FUEL QTY indicator (figure 1), set FUEL QTY selector to INTR WING.

(4) Monitor FUEL QTY indicator.

(5) Defuel aircraft (A1-F18AC-PCM-000) until LEFT and RIGHT counters on FUEL QTY indicator display 0000.

(6) Remove external electrical power (A1-F18AC-LMM-000).

b. Drain wing residual fuel (A1-F18AC-PCM-000).

c. Remove door 34R or 34L (A1-F18AC-LMM-010).

d. Do or observe applicable fuel tank maintenance precautions (WP013 00).

e. If removing left wing transmitter, do substeps below:

(1) On 161353 THRU 161519 BEFORE F/A-18 AFC 27, remove shaft and connecting link (A1-F18AC-570-300, WP035 00).

(2) On 161520 AND UP; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 27, remove right leading edge flap servo and drive unit, shaft, and connecting link (A1-F18AC-570-300, WP036 01).

(3) Disconnect plug (5P-M036) and position wire bundle away from cover (4, sheet 2).

(4) Remove clamps (5 and 6, detail A) and attaching parts.

f. If removing right wing transmitter, do substeps below:

(1) Disconnect plug (5P-N040) and position wire bundle away from cover (4, sheet 2) area.

(2) Remove clamps (7 and 8, detail A) and attaching parts.



In door 34R, do not remove shaft for access. If shaft is removed, leading edge flap system must be rigged to prevent damage.

g. Remove cover (4, sheet 2), bolts (1) with washers, and packings (2).

h. Remove bolts (9, detail B), spacers (12), and clamps (10 and 16).

i. Remove bolts (13) and disconnect transmitter (14).

j. On left transmitter, remove clamp (11) and bolt (15).

k. On 472995-309 transmitters, remove screws (18, 20, and 21, detail B) and remove transmitter (14).

l. On 472995-409 transmitters, remove screws (18, 20, and 21, configuration X), and remove transmitter (14).

m. Cover door openings 34R or 34L to prevent contamination.

2. INSTALLATION.



Petrolatum

1

a. Lubricate new packings (2, figure 1, sheet 2) with petrolatum.

b. On 472995-309 transmitters, connect terminal lugs with screws (18, 20, and 21, detail C) to terminal block of transmitter (14).

c. If installing 472995-409 transmitters (configuration X) in place of 472995-309 transmitter, two washers (23) may be added between lug and screw (20), two washers (24) between lug and screw (18), and one washer (25) between lug and screw (21) to make sure terminal lug is tight. Replace concave washers (17, 19, and 22) to capture screws.

d. Torque screws per substeps below: (QA)

(1) Torque screw (20) to 7 inch-pounds.

(2) Torque screw (18) to 12 inch-pounds.

(3) Torque screw (21) to 16 inch-pounds.

e. On transmitters (14), remove strain relief clamp and screw supplied with transmitter and replace with clamp (11) and bolt (15) on left wing transmitter only.

NOTE

Make sure terminal block of transmitter is positioned inboard and clamps are rotated opposite terminal block and locked in position.

f. Position transmitter (14) with terminal block inboard and rotate clamps opposite terminal block to locked position. Install bolts (13, detail B).

g. Install clamps (16 and 10), bolts (9), and spacers (12).

h. Install cover (4, sheet 2) and bolts (1) with washers directly under head of bolt and packings (2) next to washers.

i. Torque bolts (1) 50 to 70 inch-pounds. (QA)

j. On left wing, do substeps below:

(1) Connect plug (5P-M036).

(2) Install clamps (5 and 6, detail A) and attaching parts.

(3) Connect utility and emergency battery connectors (WP013 00).

(4) Remove no power tag from external power receptacle.

(5) Refuel aircraft using electrical power (A1-F18AC-PCM-000).

(6) Inspect cover (4, sheet 2) area for leaks.

(7) Apply external electrical power (A1-F18AC-LMM-000).

(8) On cockpit FUEL QTY indicator (figure 1), set FUEL QTY selector to INTER WING and observe that correct internal wing amount is displayed on LEFT and RIGHT counters.

(9) Remove external electrical power (A1-F18AC-LMM-000).

(10) On 161353 THRU 161519 BEFORE F/A-18 AFC 27, install connecting link and shaft (A1-F18AC-570-300, WP035 00).

(11) On 161520 AND UP; ALSO 161353 THRU 161519 AFTER F/A-18 AFC 27, install right leading edge flap servo valve and drive unit, shaft and connecting link (A1-F18AC-570-300, WP036 01).

k. On right wing, do substeps below:

(1) Connect plug (5P-N040, figure 1).

(2) Install clamp (7 and 8, detail A) on wire bundle and wing lock control cable and install attaching parts.

(3) Connect utility and emergency battery connectors (WP013 00).

(4) Remove no power tag from external power receptacle.

(5) Refuel aircraft using electrical power (A1-F18AC-PCM-000).

(6) Inspect cover (4, sheet 2) area for leaks.

(7) Apply external electrical power (A1-F18AC-LMM-000).

(8) On cockpit FUEL QTY indicator (figure 1), set FUEL QTY selector to INTER WING and observe that correct amount is displayed on LEFT and RIGHT counters.

(9) Remove external electrical power (A1-F18AC-LMM-000).

l. Install cover (4, sheet 2), bolts (1) with washers and packings

m. Close doors 34R or 34L (A1-F18AC-LMM-010).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

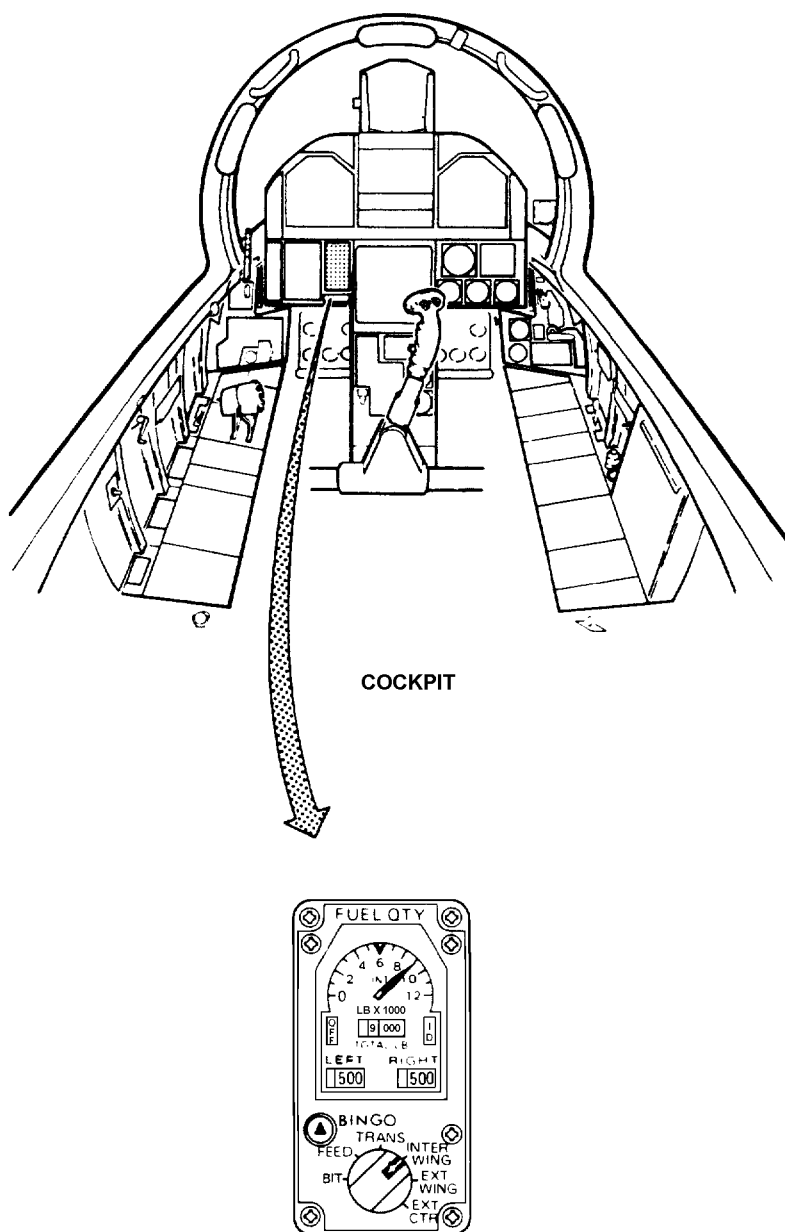


Figure 1. Inboard Wing Fuel Quantity Transmitter (5A-U039 or 5A-V043) (Sheet 1)

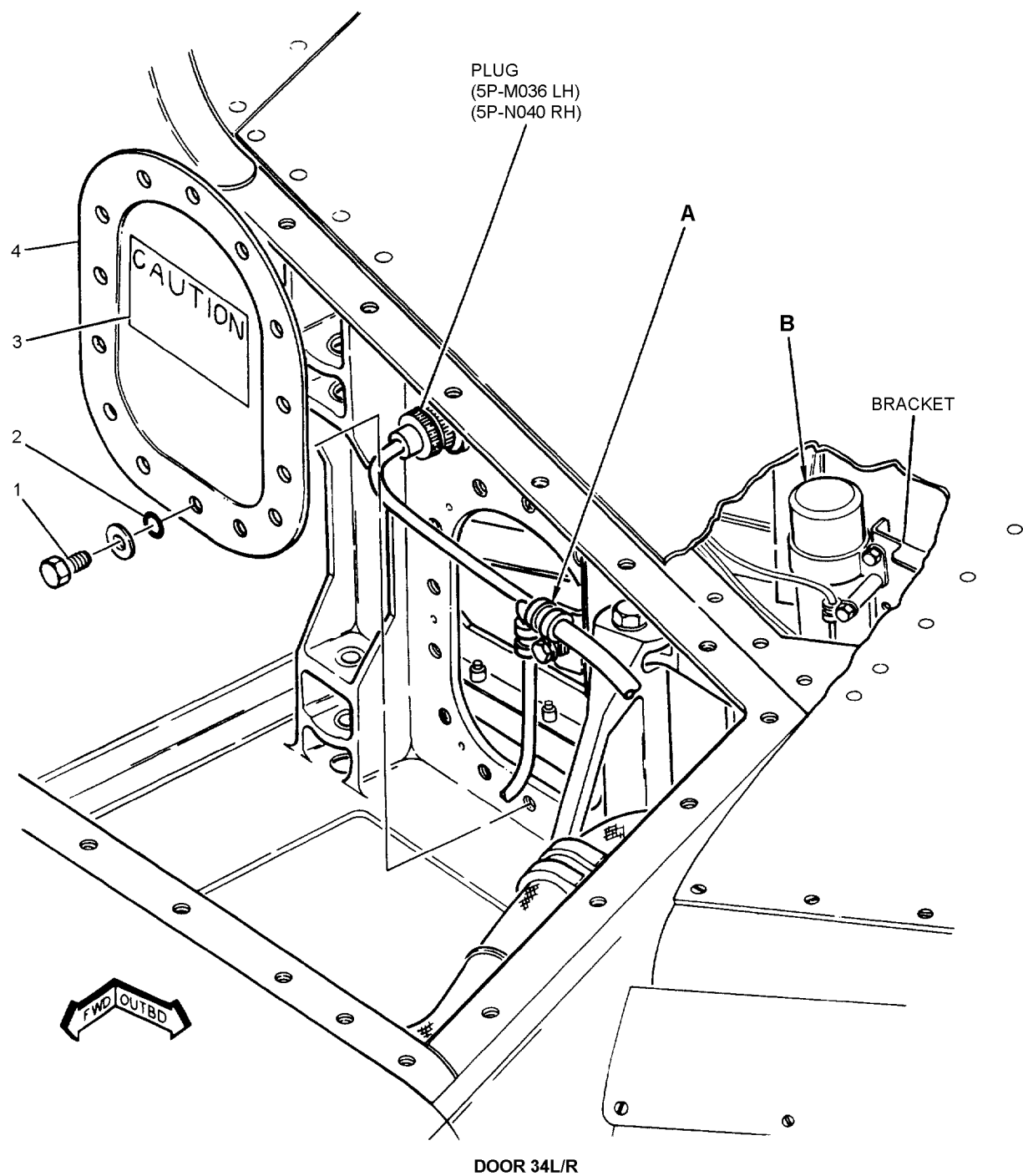


Figure 1. Inboard Wing Fuel Quantity Transmitter (5A-U039 or 5A-V043) (Sheet 2)

1680001B

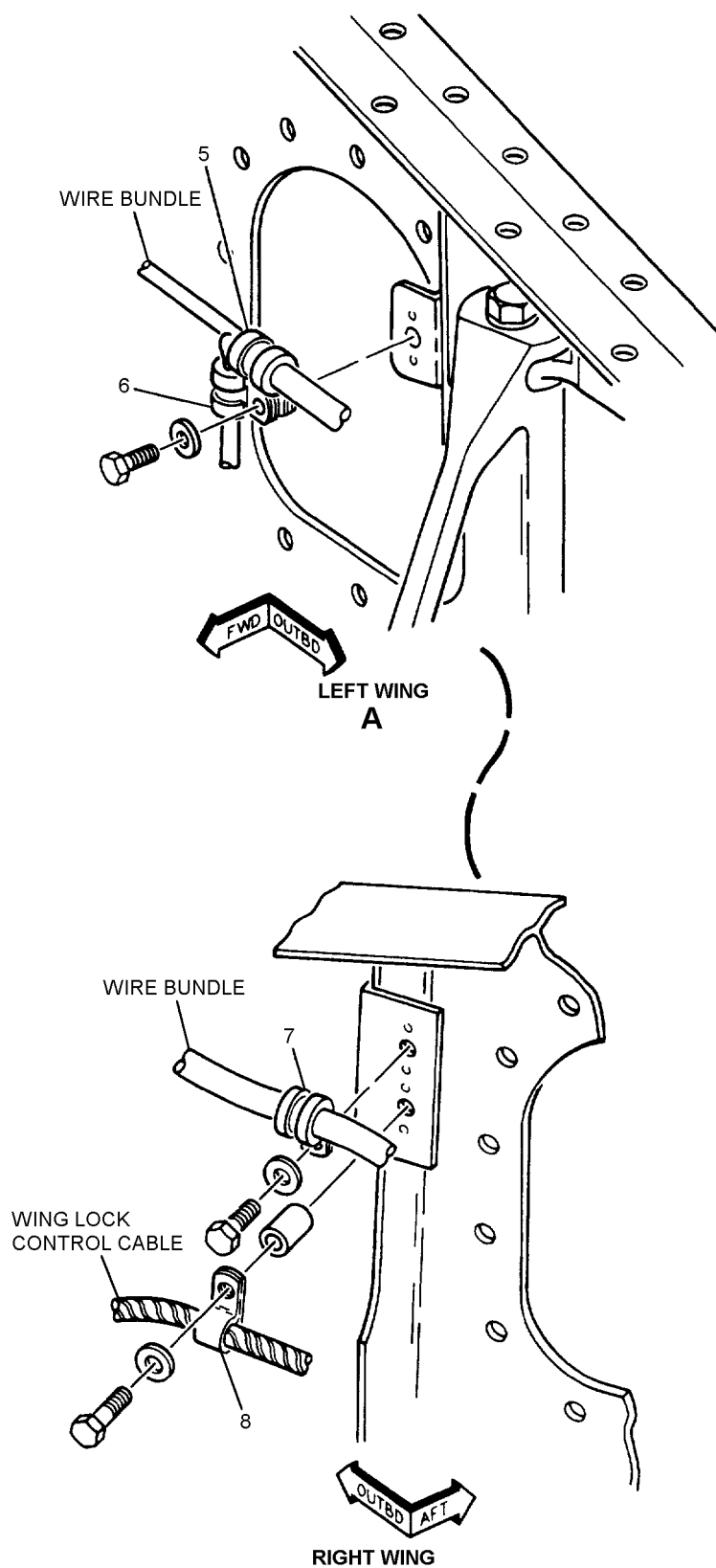


Figure 1. Inboard Wing Fuel Quantity Transmitter (5A-U039 or 5A-V043) (Sheet 3)

1680001C

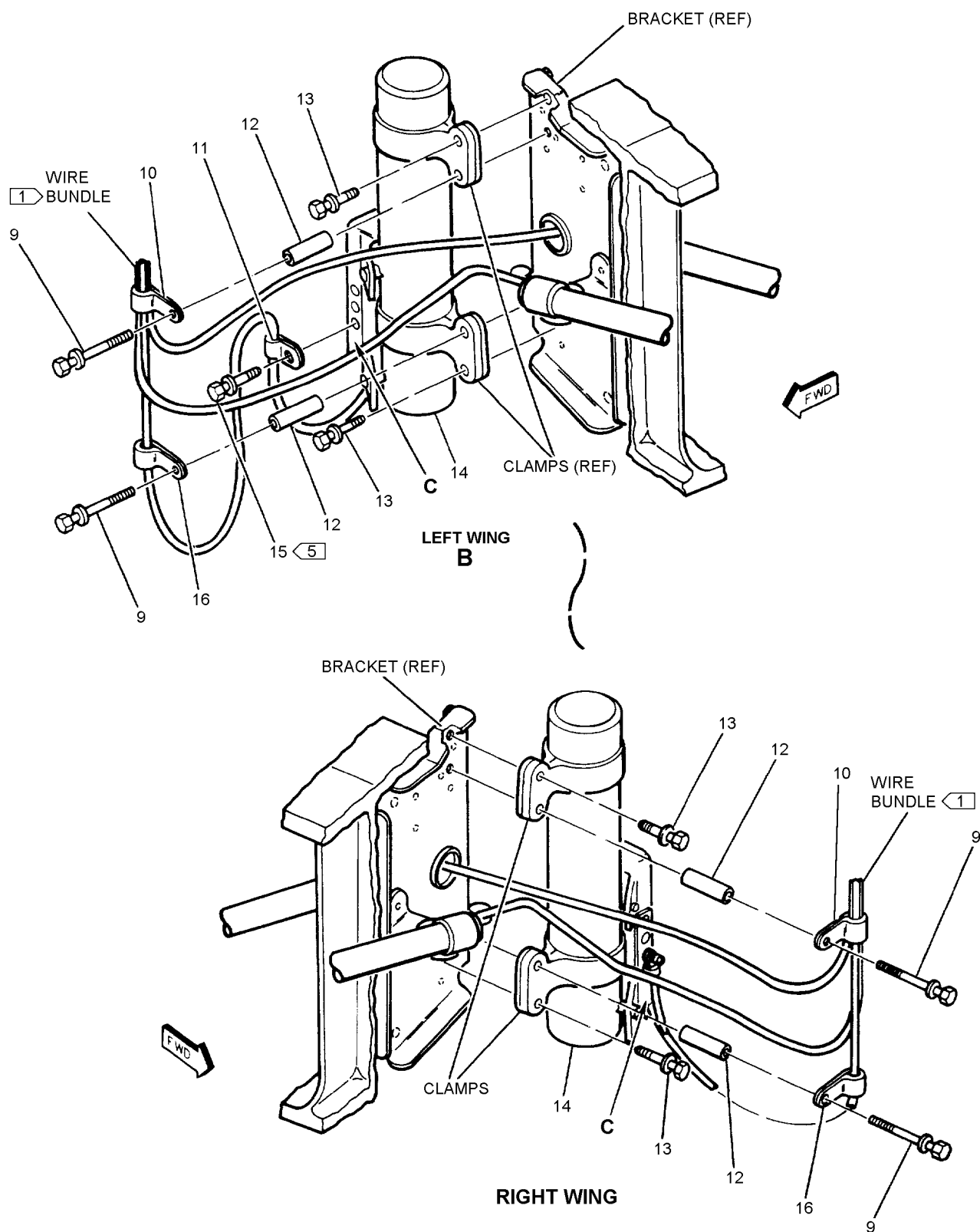
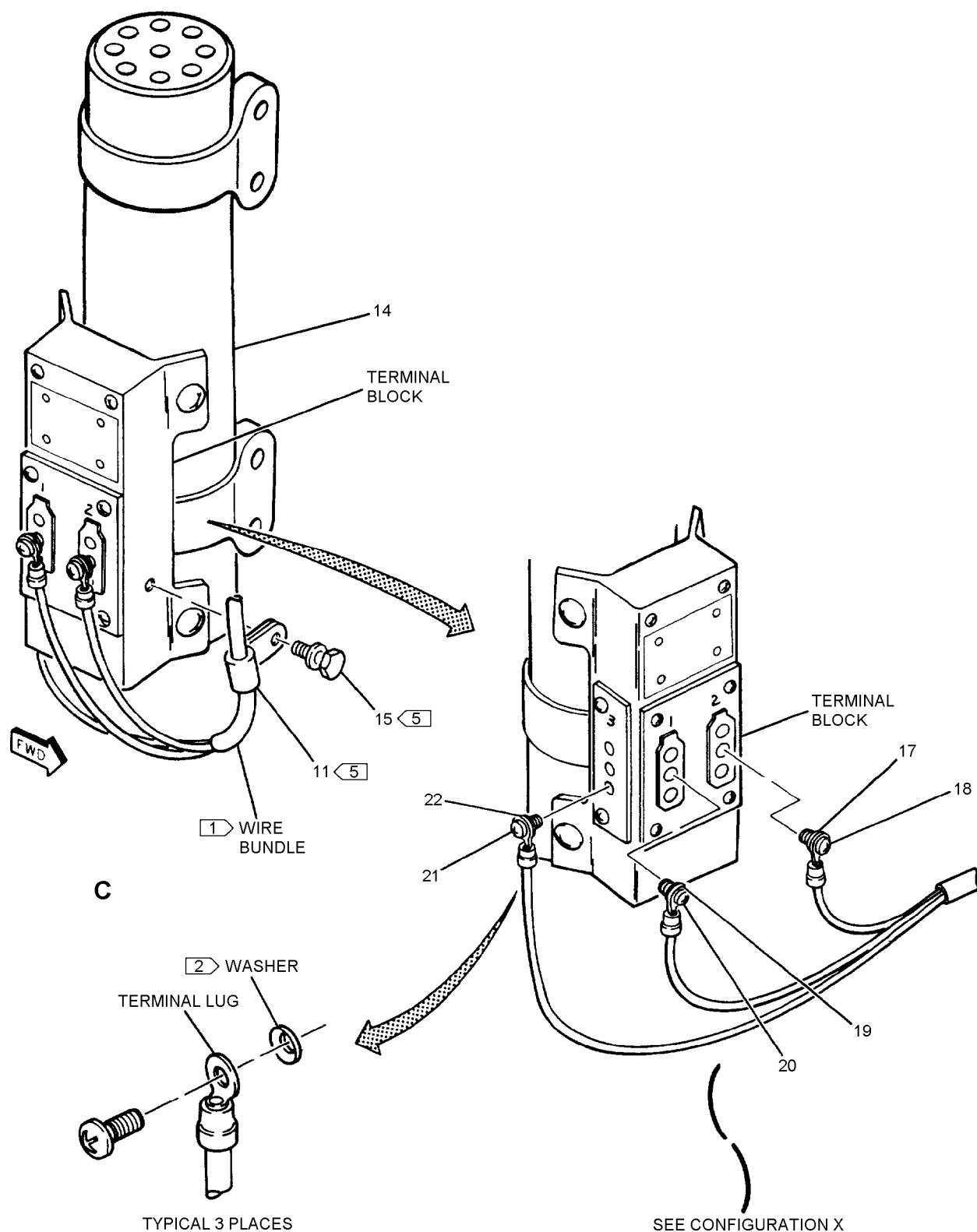


Figure 1. Inboard Wing Fuel Quantity Transmitter (5A-U039 or 5A-V043) (Sheet 4)

1680001D



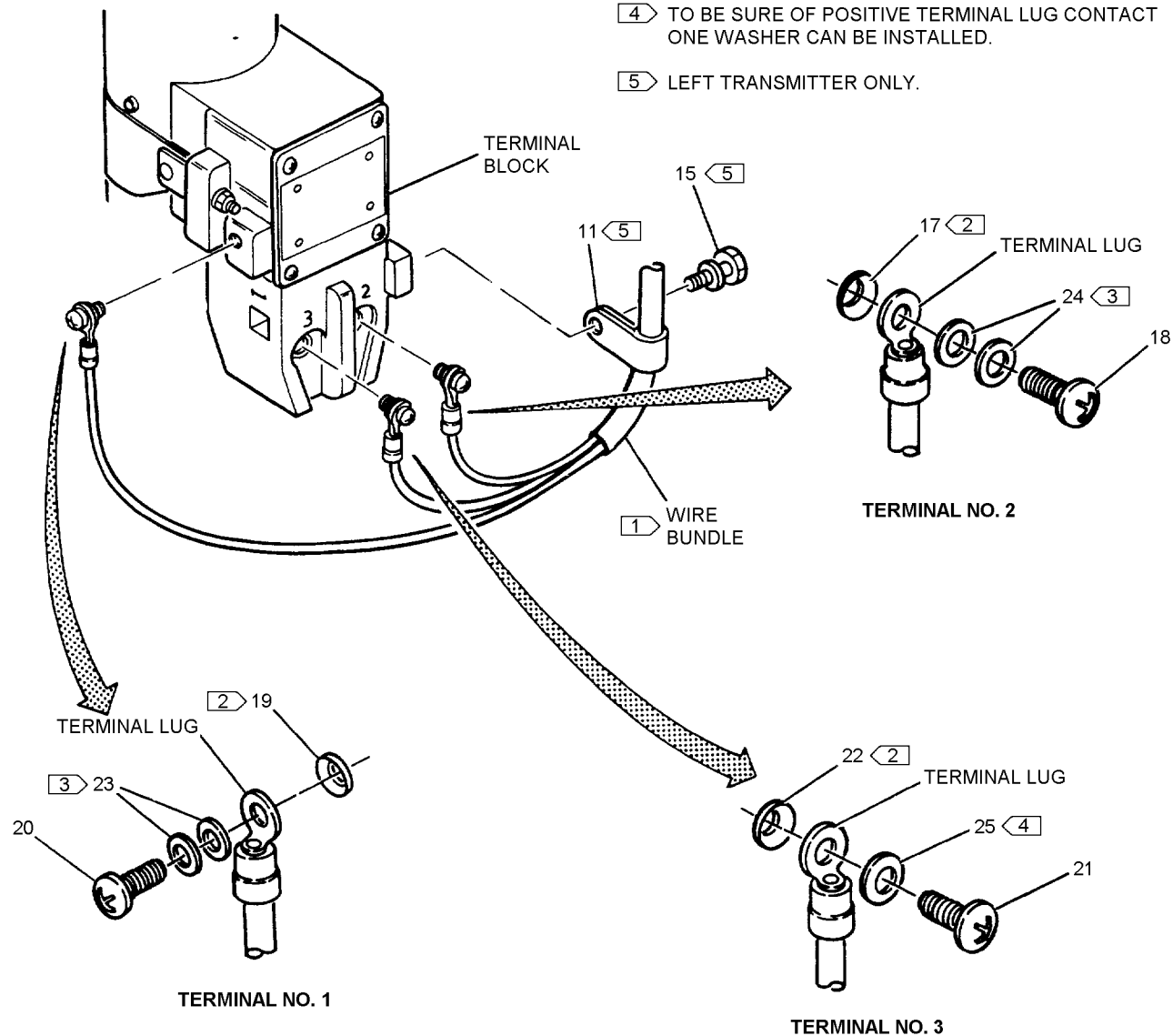
472995-309

Figure 1. Inboard Wing Fuel Quantity Transmitter (5A-U039 or 5A-V043) (Sheet 5)

1680001E

LEGEND

- [1] TO LOCATE WIRE TERMINAL REPAIR INFORMATION IN A1-F18AC-WRM-000 USE WRA REFERENCE DESIGNATOR AND TERMINAL NUMBER.
- [2] CONCAVE SIDE OF WASHER FACES TERMINAL LUG.
- [3] TO BE SURE OF POSITIVE TERMINAL LUG CONTACT TWO WASHERS MAXIMUM CAN BE INSTALLED.
- [4] TO BE SURE OF POSITIVE TERMINAL LUG CONTACT ONE WASHER CAN BE INSTALLED.
- [5] LEFT TRANSMITTER ONLY.



472995-409

CONFIGURATION X**Figure 1. Inboard Wing Fuel Quantity Transmitter (5A-U039 or 5A-V043) (Sheet 6)**

1680001F

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		INBOARD WING FUEL QUANTITY									
		TRANSMITTER (5A-U039 OR 5A-V043)									
1	VS3207-4-6	.							14	*	PAOZZ
		BOLT, CLOSE TOLERANCE (92215)									
		(MCDONNELL SPEC ST3M731-4-6)									
	SC2663-4-6	.							14	*	PAOZZ
		BOLT, CLOSE TOLERANCE (06950)									
		(MCDONNELL SPEC ST3M731-4-6)									
	PBF1264-4-6	.							14	*	PAOZZ
		BOLT, CLOSE TOLERANCE (27624)									
		(MCDONNELL SPEC ST3M731-4-6)									
	111364-4-6	.							14	*	PAOZZ
	AN960JD416	.							14		PAOZZ
2	NAS1523AA4F	.							14		PAOZZ
3	74A890109-2001	.							1		MDOZZ
		PLATE, INSTRUCTION - LE FLAP DRIVE									
		(CAUTION) (76301)									
4	74A110850-1001	.							1		XCOZZ
		COVER, ACCESS - CLOSURE, RIB, FWD,									
		INNER WING (76301)									
5	MS21919WDG5	.							1		PAOZZ
	NAS673V3	.							1		PAOZZ
	AN960JD10L	.							1		PAOZZ
6	MS21919WDG3	.							1		PAOZZ
7	MS21919WDG5	.							1		PAOZZ
	NAS673V3	.							1		PAOZZ
	AN960JD10L	.							1		PAOZZ
8	MS21919WDG5	.							1		PAOZZ
	NAS673V6	.							1		PAOZZ
	AN960JD10L	.							1		PAOZZ
	NAS42DD6-12	.							1		PAOZZ
9	D16173C3-23	.							2	*	PAOZZ
		SCREW, CAP, SOCKET HEAD (08524)									
		(MCDONNELL SPEC 3M965C3-23)									
	80860C3-23	.							2	*	PAOZZ
	CS3046C3-23	.							2	*	PAOZZ
	SC2818C3-23	.							2	*	PAOZZ
10	MS25281-R4	.							1		PAOZZ
11	MS25281-R2 @	.							1		PAOZZ
		CLAMP (SUPERSEDES MS25281-4)									
		CLAMP (LEFT WING ONLY)									
		(SUPERSEDES MS25281-2)									
12	NAS43DD3-64	.							2		PAOZZ
13	VDP0002-5	.							2	*	PAOZZ
		BOLT, ASSEMBLED WASHER (06710)									
		(MCDONNELL SPEC 3M881V3-5)									
	111026-3-5	.							2	*	PAOZZ
		BOLT, ASSEMBLED WASHER (80539)									
		(MCDONNELL SPEC 3M881V3-5)									
	T981-3-5	.							2	*	PAOZZ
		BOLT, ASSEMBLED WASHER (97928)									
		(MCDONNELL SPEC 3M881V3-5)									
	SC2670-3-5	.							2	*	PAOZZ
		BOLT, ASSEMBLED WASHER (06950)									
		(MCDONNELL SPEC 3M881V3-5)									
	D16175-10-5	.							2	*	PAOZZ
		BOLT, ASSEMBLED WASHER (08524)									
		(MCDONNELL SPEC 3M881V3-5)									
14	472995-409	.							1		PAOZZ
		TRANSMITTER, LIQUID QUANTITY INBD									
		WING, FUEL (INBOARD WING FUEL									
		QUANTITY TRANSMITTER) (89305)									
		(MCDONNELL SPEC 74-580056-219)									
		(5A-U039 OR 5A-V043) (REPLACES									
		472995-309)									

Figure 1. Inboard Wing Fuel Quantity Transmitter (5A-U039 or 5A-V043) (Sheet 7)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
	472995-309	.						TRANSMITTER, LIQUID QUANTITY INBD	1	*	PAOZZ
		.						WING, FUEL (INBOARD WING FUEL			
		.						QUANTITY TRANSMITTER) (89305)			
		.						(MCDONNELL SPEC 74-580056-219)			
		.						(5A-U039 OR 5A-V043)			
		.						(USE UNTIL EXHAUSTED)			
15	VDP0002-3 @	.						BOLT, ASSEMBLED WASHER (06710)	1	*	PAOZZ
		.						(MCDONNELL SPEC 3M881V3-3)			
		.						(LEFT WING ONLY)			
	111026-3-3 @	.						BOLT, ASSEMBLED WASHER (80539)	1	*	PAOZZ
		.						(MCDONNELL SPEC 3M881V3-3)			
		.						(LEFT WING ONLY)			
	T981-3-3 @	.						BOLT, ASSEMBLED WASHER (97928)	1	*	PAOZZ
		.						(MCDONNELL SPEC 3M881V3-3)			
		.						(LEFT WING ONLY)			
	SC2670-3-3 @	.						BOLT, ASSEMBLED WASHER (06950)	1	*	PAOZZ
		.						(MCDONNELL SPEC 3M881V3-3)			
		.						(LEFT WING ONLY)			
	D16175-10-3 @	.						BOLT, ASSEMBLED WASHER (08524)	1	*	PAOZZ
		.						(MCDONNELL SPEC 3M881V3-3)			
		.						(LEFT WING ONLY)			
16	MS25281-R2	.						CLAMP (SUPERSEDES MS25281-2)	1	*	PAOZZ
17	396648	.						WASHER, CONICAL (89305) (MCDONNELL	1	*	PAOZZ
		.						SPEC ST4M159-08)			
	448-3-2	.						WASHER, CONICAL (06968) (MCDONNELL	1	*	PAOZZ
		.						SPEC ST4M159-08)			
18	466604-008	.						SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		.						(89305) (MCDONNELL SPEC ST3M560-5)			
	MA3560-5	.						SEE ABOVE (58845)	1	*	PAOZZ
	1AM121070-5	.						SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-5	.						SEE ABOVE (58998)	1	*	PAOZZ
19	396973	.						WASHER, CONICAL (89305) (MCDONNELL	1	*	PAOZZ
		.						SPEC ST4M159-06)			
	448-3-1	.						SEE ABOVE (06968)	1	*	PAOZZ
20	466604-006	.						SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		.						(89305) (MCDONNELL SPEC ST3M560-4)			
	MA3560-4	.						SEE ABOVE (58845)	1	*	PAOZZ
	1AM121070-4	.						SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-4	.						SEE ABOVE (58998)	1	*	PAOZZ
21	466604-010	.						SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		.						(89305) (MCDONNELL SPEC ST3M560-6)			
	MA3560-6	.						SEE ABOVE (58845)	1	*	PAOZZ
	1AM121070-6	.						SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-6	.						SEE ABOVE (58998)	1	*	PAOZZ
22	396974	.						WASHER, CONICAL (89305) (MCDONNELL	1	*	PAOZZ
		.						SPEC ST4M159-3)			
	448-3-3	.						SEE ABOVE (06968)	1	*	PAOZZ
23	AN960C6 +	.						WASHER	2		PAOZZ
24	AN960C8 +	.						WASHER	2		PAOZZ
25	AN960C10L +	.						WASHER	1		PAOZZ

Figure 1. Inboard Wing Fuel Quantity Transmitter (5A-U039 or 5A-V043) (Sheet 8)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

@ REPLACE CLAMP AND BOLT SUPPLIED
WITH REPLACEMENT TRANSMITTER
WITH ITEMS FLAGGED TO THIS SYMBOL.

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

+ USE WITH 472995-409

ORGANIZATIONAL MAINTENANCE

SYSTEM MAINTENANCE WITH IPB

CENTER WING FUEL QUANTITY TRANSMITTER (5A-U038 OR 5A-V042)

FUEL QUANTITY SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captain Manual	A1-F18AC-PCM-000

Alphabetical Index

Subject	Page No.
Illustrated Parts Breakdown	3
Installation	2
Removal	1

Record of Applicable Technical Directives

None

Support Equipment Required

NOTE

Nomenclature **Part Number or
Type Designation**

This procedure is typical for left or right
transmitter.

Torque Wrench,
0 to 25
Inch-Pounds

-

1. **REMOVAL.**

a. Defuel wing per substeps below:

(1) Do or observe defueling precautions
(A1-F18AC-PCM-000).

(2) Apply electrical power (A1-F18AC-
LMM-000).

Materials Required

None

(3) On cockpit FUEL QTY indicator, set FUEL QTY selector to INTR WING (figure 1).

(4) Monitor FUEL QTY indicator.

(5) Defuel aircraft (A1-F18AC-PCM-000) until LEFT and RIGHT counters on FUEL QTY indicator display 0000.

(6) Remove electrical power (A1-F18AC-LMM-000).

b. Do or observe applicable fuel tank maintenance precautions (WP013 00).

c. Drain residual fuel per substeps below:



Jet Fuel



7

WARNING

To prevent personal injury, do not stand directly under wing drain valve while draining residual fuel.

(1) Position an approved safety container under WING drain valve (A1-F18AC-LMM-000), then manually unseat drain valve.

(2) Close drain valve when all residual fuel has been drained.

d. Remove door 76R or 76L (A1-F18AC-LMM-010).

e. On 472995-313 transmitter, do substeps below:

(1) Remove clamps (1 and 3, figure 1, sheet 2), nut (4), and bolt (2).

(2) Remove bolts (6) and disconnect transmitter (5).

(3) Remove clamp (1) and bolt (7).

(4) Remove screws (8, 10, and 12, detail A) and remove transmitter (5).

f. On 472995-413 transmitter, do substeps below:

(1) Remove clamps (2 and 4, figure 2, sheet 2), nut (3), and bolt (1).

(2) Remove bolts (6) and disconnect transmitter (5).

(3) On right side, remove clamp (7, detail A) and bolt (8).

(4) Remove screws (11, 14, and 17) and remove transmitter (5, sheet 3).

g. To prevent contamination, cover door opening with door 76R or 76L.

2. INSTALLATION.

a. If installing transmitter (5, figure 1, sheet 2) on right side, rotate mounting clamp 180° per substeps below:

(1) Loosen nuts on metal clamps holding terminal block.

(2) Rotate mounting clamp to next detent.

(3) Retighten nuts on metal clamps.

b. On 472995-313 transmitter, do substeps below:

(1) Remove strain relief clamp and screw supplied with transmitter and replace with clamp (1) and bolt (7).

(2) Attach wires with screws to terminal block of transmitter (5, detail A) as listed below:

(a) Torque screw (10) to 7 inch-pounds.

(b) Torque screw (8) to 12 inch-pounds.

(c) Torque screw (12) to 16 inch-pounds.

(3) Install clamp (1), bolt (7), and wire bundle.

NOTE

Make sure terminal block of transmitter (5) is positioned inboard and mounting clamp is rotated forward and locked in position.

(4) Install bolts (6, sheet 2) and transmitter (5).

(5) Position clamps (1 and 3) so that wire bundle clears transmitter (5) by 0.4 inch minimum then install bolt (2) and nut (4).

c. On 472995-413 transmitter, do substeps below:

(1) Remove strain relief clamp and screw supplied with transmitter and replace with clamp (7, figure 2, detail A) and bolt (8) on right side only.

(2) Attach wires with screws to terminal lock of transmitter (5) as listed below:

(a) Torque screw (17) to 7 inch-pounds.

(b) Torque screw (11) to 12 inch-pounds.

(c) Torque screw (14) to 16 inch-pounds.

(3) If positive terminal lug contact is not made, add washers (10, 13, 16, detail A).

(4) Route wire bundle through clamp (7), right side only.

NOTE

Make sure terminal block of transmitter (5, sheet 2) is facing inboard and mounting clamp is rotated forward and locked in position.

(5) Install bolts (6) in transmitter (5).

(6) Position clamps (2 and 4) so that wire bundle clears transmitter (5) by 0.4 inch minimum, then install bolt (1) and nut (3).

d. Install door 76L or 76R (A1-F18AC-LMM-010).

e. Connect utility and emergency battery connectors (WP013 00).

f. Inspect for correct transmitter (5) operation per substeps below:

(1) Refuel aircraft using electrical power (A1-F18AC-PCM-00).

(2) On cockpit FUEL QTY indicator, set FUEL QTY selector to INTR WING (figure 2) and observe that correct internal wing fuel amount is displayed on LEFT and RIGHT counters (A1-F18AC-PCM-000).

g. Remove no power tag from external power receptacle.

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

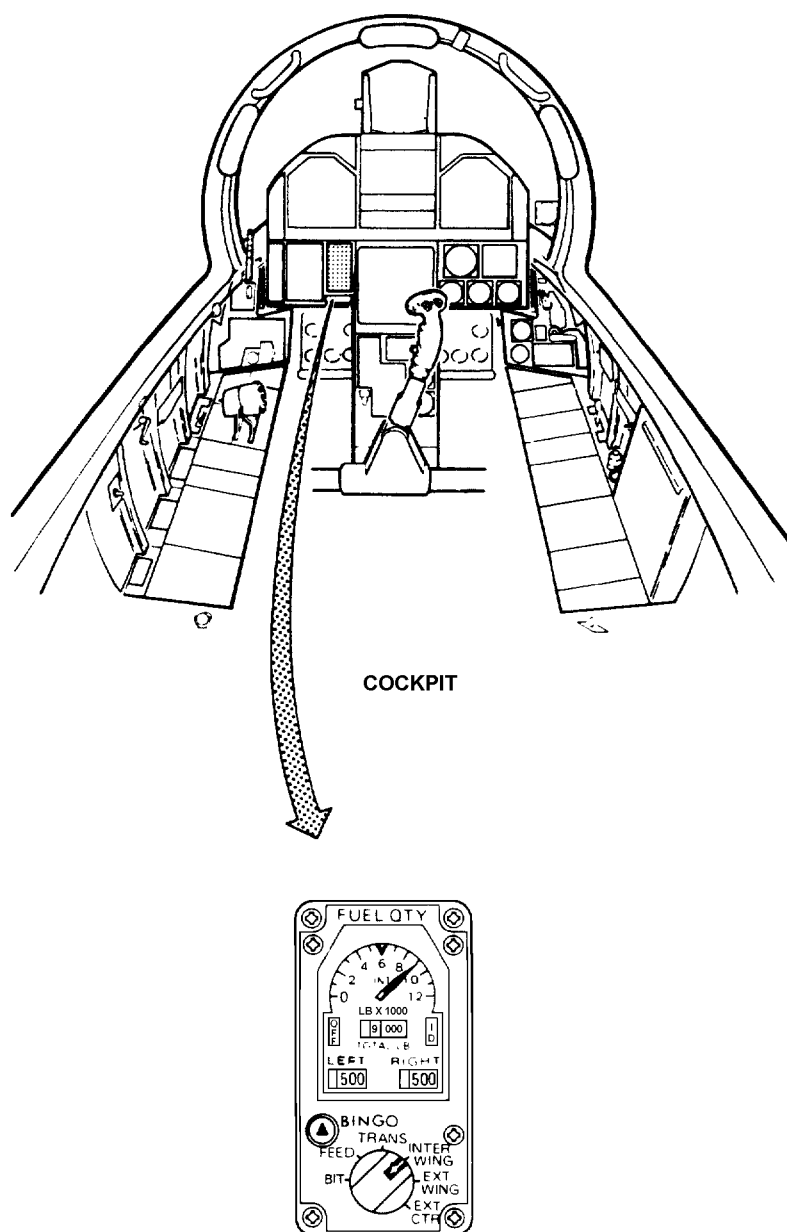
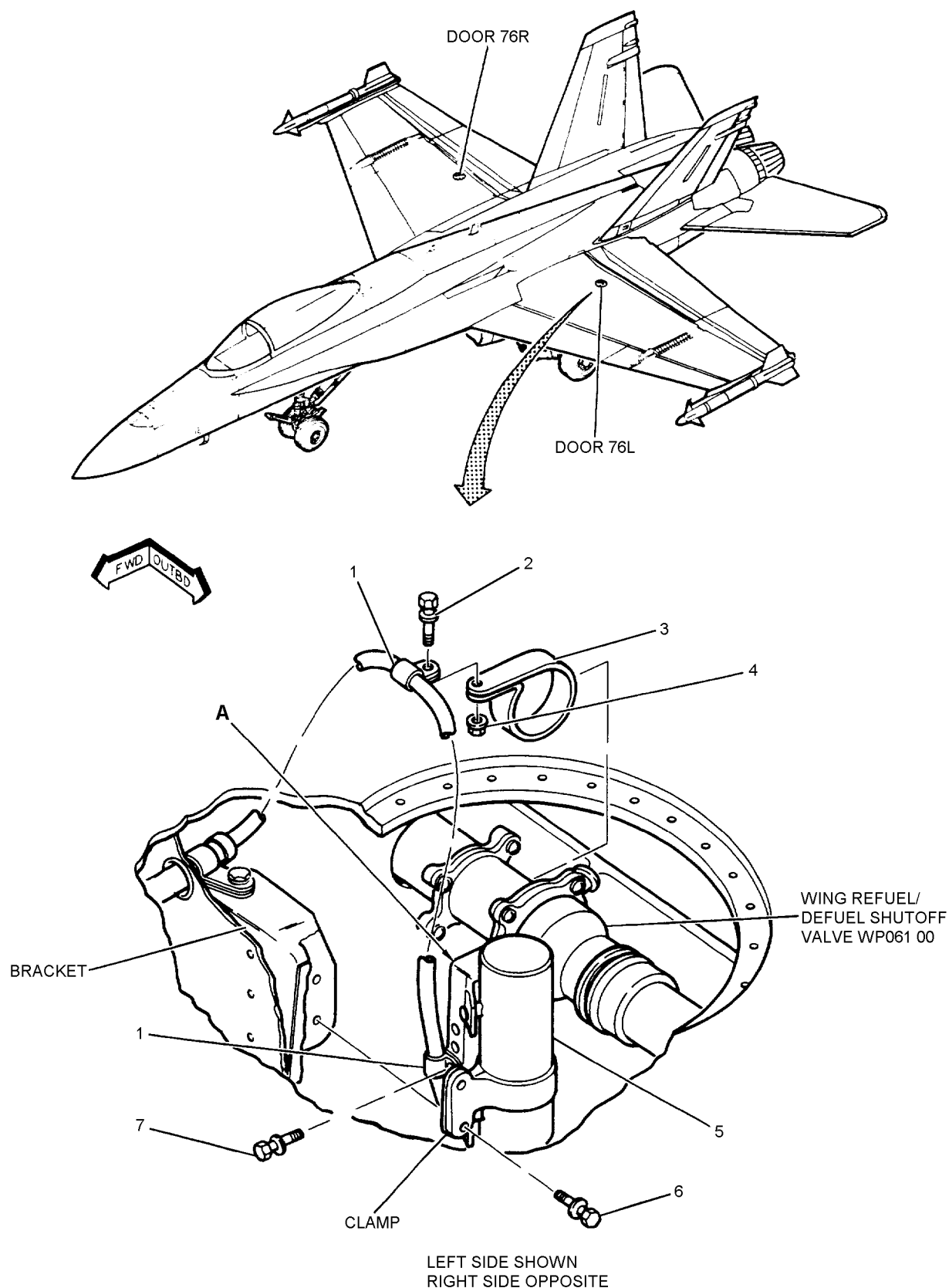
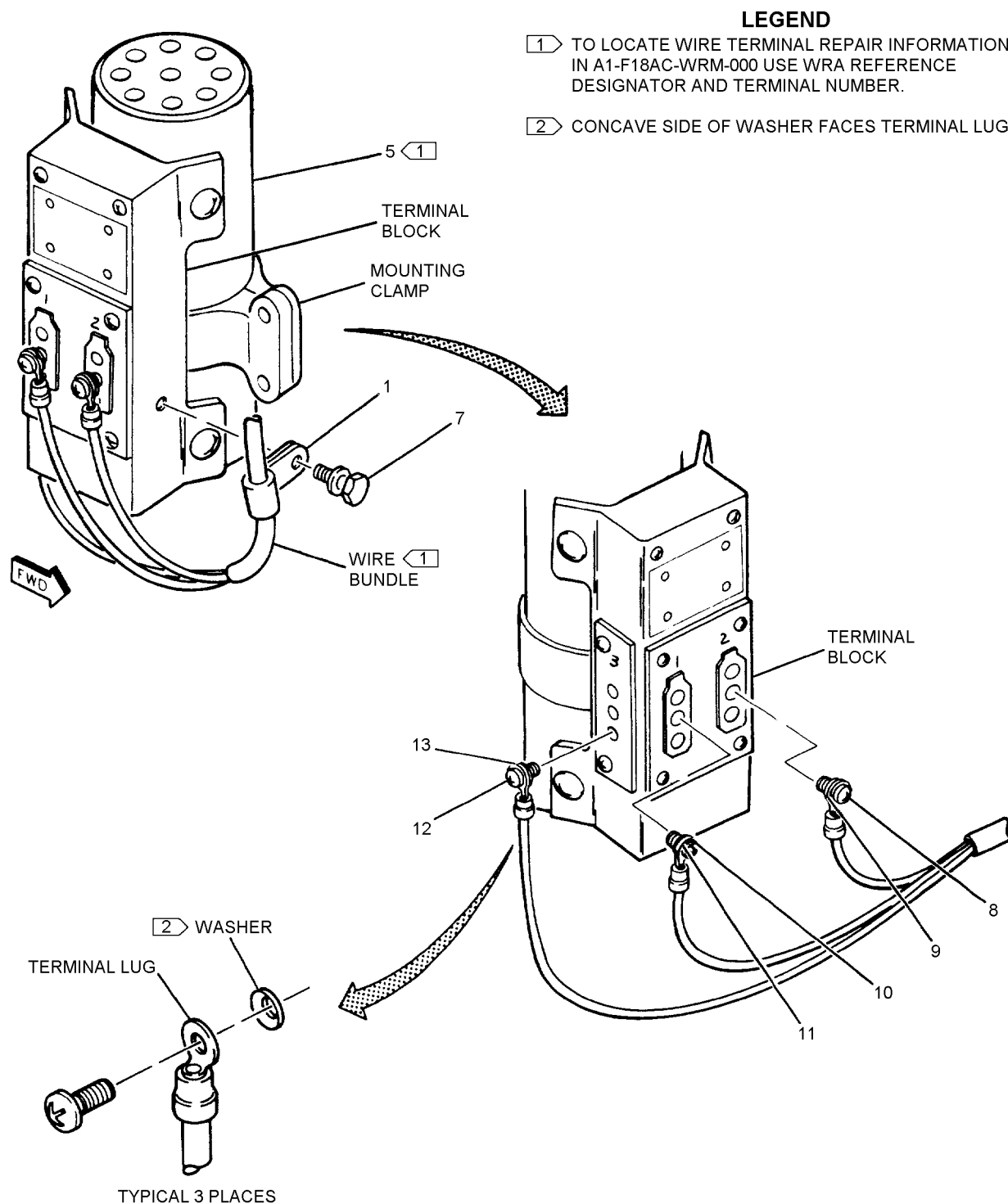


Figure 1. Center Wing Fuel Quantity Transmitter - 472995-313
(5A-U038 or 5A-V042) (Sheet 1)



**Figure 1. Center Wing Fuel Quantity Transmitter - 472995-313
(5A-U038 or 5A-V042) (Sheet 2)**



A

**Figure 1. Center Wing Fuel Quantity Transmitter - 472995-313
(5A-U038 or 5A-V042) (Sheet 3)**

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		CENTER WING FUEL QUANTITY									
		TRANSMITTER - 472995-313 (5A-U038 OR 5A-V042)									
1	MS25281-2	.	CLAMP						2		PAOZZ
2	VDP0002-5	.	BOLT, ASSEMBLED WASHER (06710)						1	*	PAOZZ
	111026-3-5	.	(MCDONNELL SPEC 3M881V3-5)								
	T981-3-5	.	BOLT, ASSEMBLED WASHER (80539)						1	*	PAOZZ
	SC2670-3-5	.	(MCDONNELL SPEC 3M881V3-5)								
	D16175-10-5	.	BOLT, ASSEMBLED WASHER (97928)						1	*	PAOZZ
		.	(MCDONNELL SPEC 3M881V3-5)								
3	MS25281-R30	.	BOLT, ASSEMBLED WASHER (06950)						1	*	PAOZZ
4	NAS1291C3M	.	(MCDONNELL SPEC 3M881V3-5)								
5	472995-313 @	.	BOLT, ASSEMBLED WASHER (08524)						1	*	PAOZZ
		.	(MCDONNELL SPEC 3M881V3-5)								
		.	CLAMP						1		PAOZZ
		.	NUT						1		PAOZZ
		.	TRANSMITTER, LIQUID QUANTITY,						1		PAOZZ
		CENTER WING LEFT AND RIGHT									
		(CENTER WING FUEL QUANTITY									
		TRANSMITTER) (89305) (MCDONNELL									
		SPEC 74-580056-233) (5A-U038 OR 5A-V042)									
6	VDP0002-5	.	BOLT, ASSEMBLED WASHER (06710)						2	*	PAOZZ
	111026-3-5	.	(MCDONNELL SPEC 3M881V3-5)								
	T981-3-5	.	BOLT, ASSEMBLED WASHER (80539)						2	*	PAOZZ
	SC2670-3-5	.	(MCDONNELL SPEC 3M881V3-5)								
	D16175-10-5	.	BOLT, ASSEMBLED WASHER (97928)						2	*	PAOZZ
		.	(MCDONNELL SPEC 3M881V3-5)								
7	VDP0002-3	.	BOLT, ASSEMBLED WASHER (08524)						2	*	PAOZZ
	111026-3-3	.	(MCDONNELL SPEC 3M881V3-5)								
	T981-3-3	.	BOLT, ASSEMBLED WASHER (80539)						1	*	PAOZZ
	SC2670-3-3	.	(MCDONNELL SPEC 3M881V3-3)								
	D16175-10-3	.	BOLT, ASSEMBLED WASHER (97928)						1	*	PAOZZ
		.	(MCDONNELL SPEC 3M881V3-3)								
8	466604-008	.	BOLT, ASSEMBLED WASHER (06950)						1	*	PAOZZ
	MA3560-5	.	(MCDONNELL SPEC 3M881V3-3)								
	1AM121070-5	.	SCREW, EXTERNALLY RELIEVED BODY						1	*	PAOZZ
	FIT7043-5	.	(89305) (MCDONNELL SPEC ST3M560-5)								
9	396648	.	SCREW, EXTERNALLY RELIEVED BODY						1	*	PAOZZ
	448-3-2	.	(58845) (MCDONNELL SPEC ST3M560-5)								
		.	SEE ABOVE (58251)						1	*	PAOZZ
		.	SEE ABOVE (58998)						1	*	PAOZZ
		.	WASHER, CONICAL (89305) (MCDONNELL						1	*	PAOZZ
		.	SPEC ST4M159-08)								
		.	WASHER, CONICAL (86968) (MCDONNELL						1	*	PAOZZ
		.	SPEC ST4M159-08)								
10	466604-006	.	SCREW, EXTERNALLY RELIEVED BODY						1	*	PAOZZ
		.	(89305) (MCDONNELL SPEC ST3M560-4)								

**Figure 1. Center Wing Fuel Quantity Transmitter - 472995-313
(5A-U038 or 5A-V042) (Sheet 4)**

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
	MA3560-4	. SCREW, EXTERNALLY RELIEVED BODY (58845) (MCDONNELL SPEC ST3M560-4)	1	*	PAOZZ
	1AM121070-4	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-4	. SEE ABOVE (58998)	1	*	PAOZZ
11	396973	. WASHER, CONICAL (89305) (MCDONNELL SPEC ST4M159-06)	1	*	PAOZZ
	448-3-1	. WASHER, CONICAL (86968) (MCDONNELL SPEC ST4M159-06)	1	*	PAOZZ
12	466604-010	. SCREW, EXTERNALLY RELIEVED BODY (89305) (MCDONNELL SPEC ST3M560-6)	1	*	PAOZZ
	MA3560-6	. SCREW, EXTERNALLY RELIEVED BODY (58845) (MCDONNELL SPEC ST3M560-6)	1	*	PAOZZ
	1AM121070-6	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-6	. SEE ABOVE (58998)	1	*	PAOZZ
13	396974	. WASHER, CONICAL (89305) (MCDONNELL SPEC ST4M159-3)	1	*	PAOZZ
	448-3-3	. WASHER, CONICAL (86968) (MCDONNELL SPEC ST4M159-3)	1	*	PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

@ 472995-313 AND 472995-413 ARE
INTERCHANGEABLE, 472995-413
IS PREFERRED.

**Figure 1. Center Wing Fuel Quantity Transmitter - 472995-313
(5A-U038 or 5A-V042) (Sheet 5)**

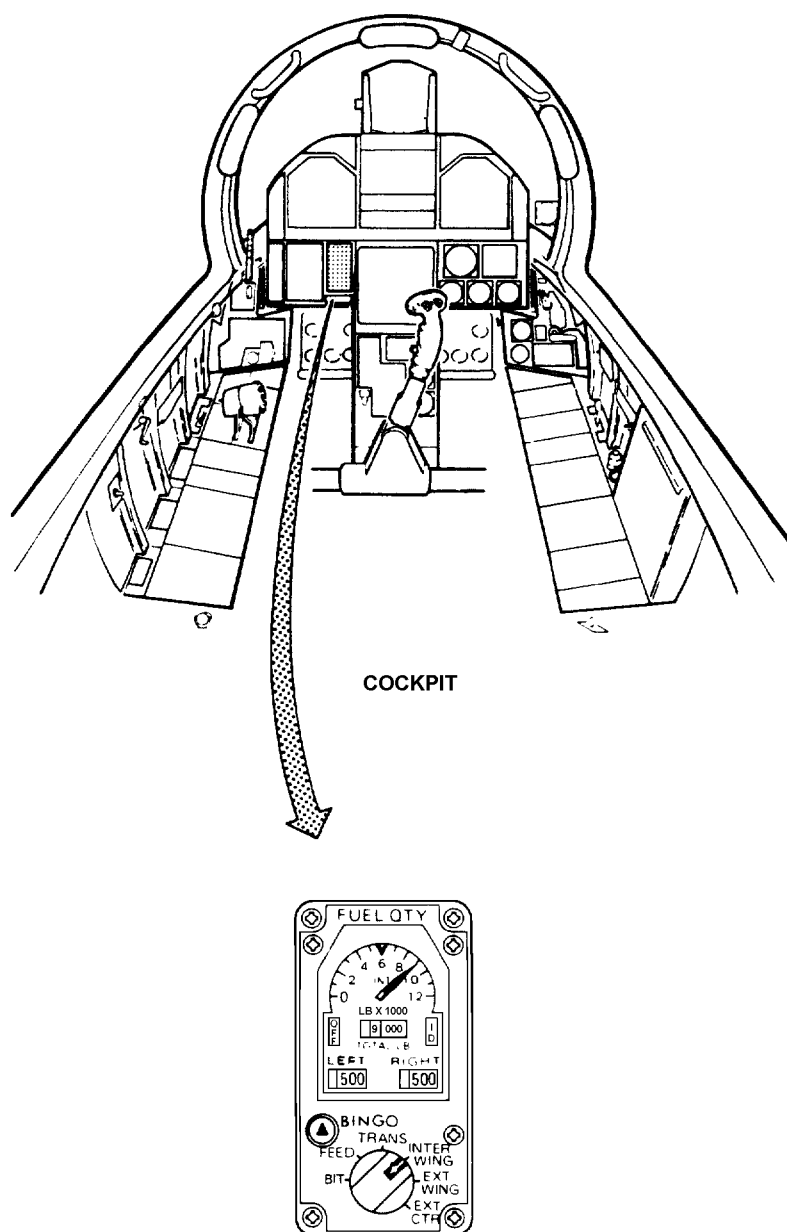


Figure 2. Center Wing Fuel Quantity Transmitter - 472995-413
(5A-U038 or 5A-V042) (Sheet 1)

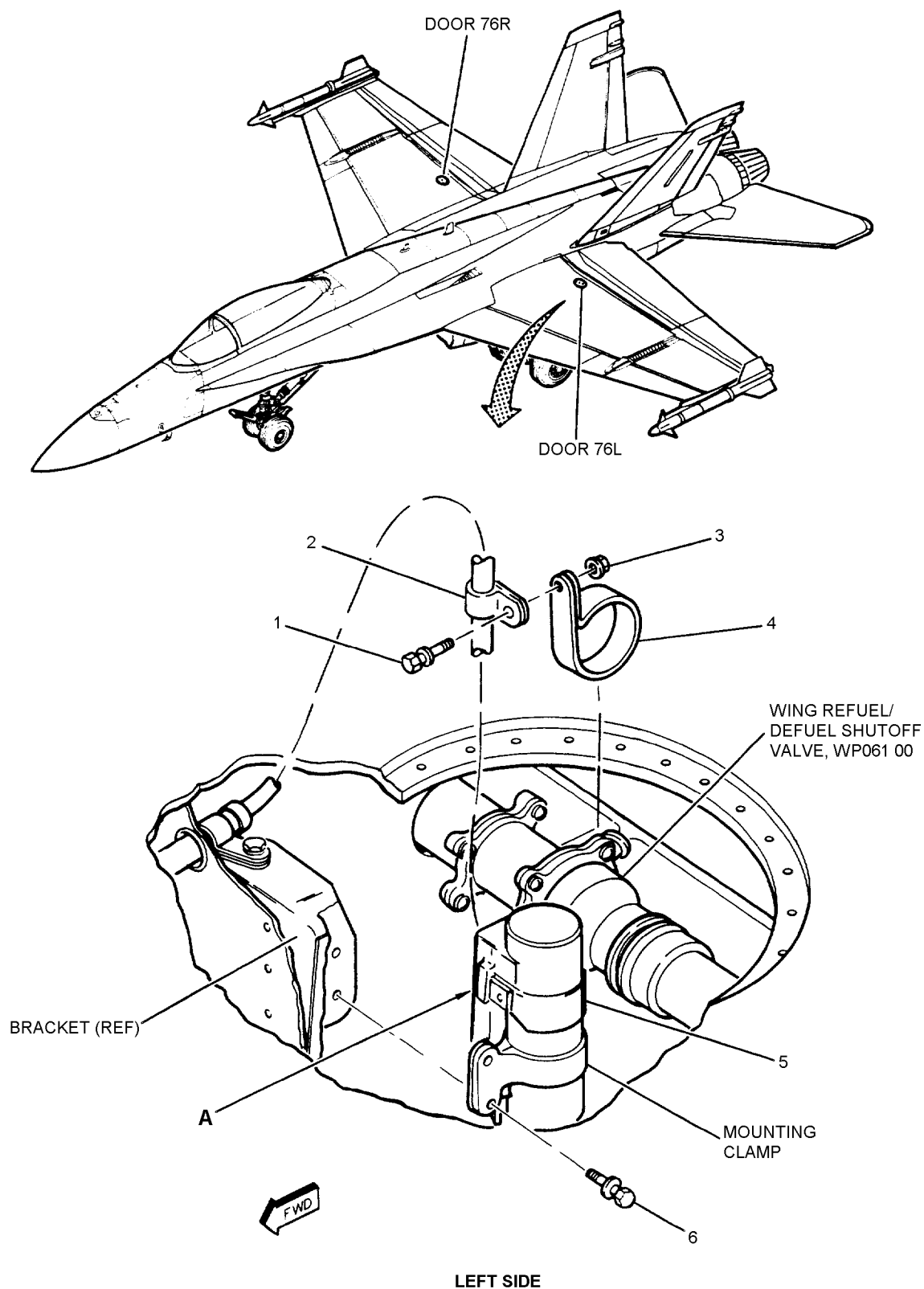
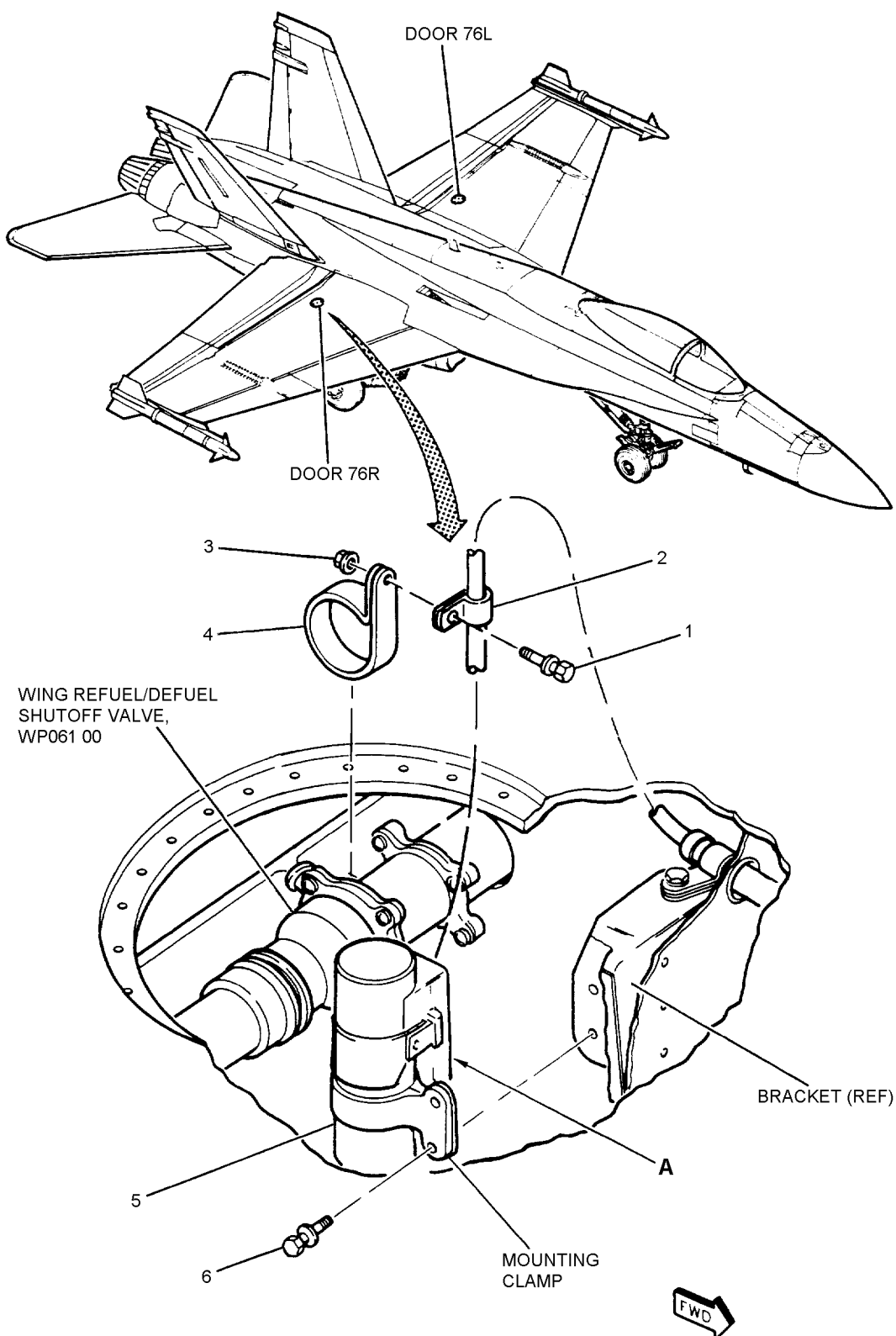


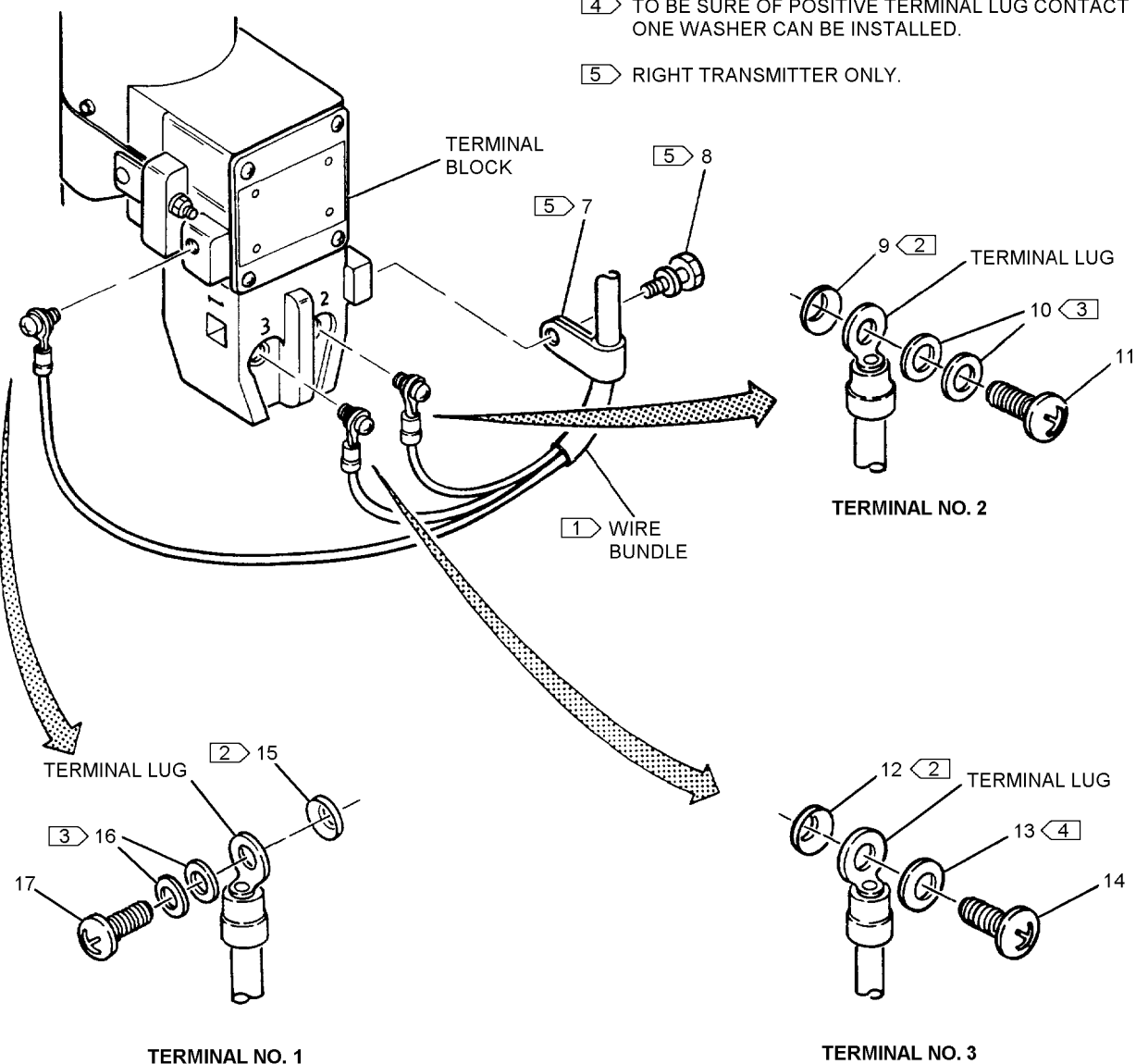
Figure 2. Center Wing Fuel Quantity Transmitter - 472995-413
(5A-U038 or 5A-V042) (Sheet 2)



**Figure 2. Center Wing Fuel Quantity Transmitter - 472995-413
(5A-U038 or 5A-V042) (Sheet 3)**

LEGEND

- [1] TO LOCATE WIRE TERMINAL REPAIR INFORMATION IN A1-F18AC-WRM-000 USE WRA REFERENCE DESIGNATOR AND TERMINAL NUMBER.
- [2] CONCAVE SIDE OF WASHER FACES TERMINAL LUG.
- [3] TO BE SURE OF POSITIVE TERMINAL LUG CONTACT TWO WASHERS MAXIMUM CAN BE INSTALLED.
- [4] TO BE SURE OF POSITIVE TERMINAL LUG CONTACT ONE WASHER CAN BE INSTALLED.
- [5] RIGHT TRANSMITTER ONLY.



A

**Figure 2. Center Wing Fuel Quantity Transmitter - 472995-413
(5A-U038 or 5A-V042) (Sheet 4)**

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		CENTER WING FUEL QUANTITY									
		TRANSMITTER - 472995-413 (5A-U038 OR 5A-V042)									
1	VDP0002-5	.	BOLT, ASSEMBLED WASHER (06710)						1	*	PAOZZ
			(MCDONNELL SPEC 3M881V3-5)								
	111026-3-5	.	SEE ABOVE (80539)						1	*	PAOZZ
	T981-3-5	.	SEE ABOVE (97928)						1	*	PAOZZ
	SC2670-3-5	.	SEE ABOVE (06950)						1	*	PAOZZ
	D16175-10-5	.	SEE ABOVE (08524)						1	*	PAOZZ
2	MS25281-2	.	CLAMP						1		PAOZZ
3	NAS1291C3M	.	NUT						1		PAOZZ
4	MS25281-R30	.	CLAMP						1		PAOZZ
5	472995-413 @	.	TRANSMITTER, LIQUID QUANTITY						1		PAOZZ
			CENTER WING LEFT AND RIGHT (CENTER WING FUEL QUANTITY TRANSMITTER) (89305) (MCDONNELL SPEC 74-580056-233) (5A-U038 OR 5A-V042)								
6	VDP0002-5	.	BOLT, ASSEMBLED WASHER (06710)						2	*	PAOZZ
			(MCDONNELL SPEC 3M881V3-5)								
	111026-3-5	.	SEE ABOVE (80539)						2	*	PAOZZ
	T981-3-5	.	SEE ABOVE (97928)						2	*	PAOZZ
	SC2670-3-5	.	SEE ABOVE (06950)						2	*	PAOZZ
	D16175-10-5	.	SEE ABOVE (08524)						2	*	PAOZZ
7	MS25281-2	.	CLAMP (RIGHT SIDE ONLY)						1		PAOZZ
8	VDP0002-3	.	BOLT, ASSEMBLED WASHER (06710)						1	*	PAOZZ
			(MCDONNELL SPEC 3M881V3-3)								
	111026-3-3	.	SEE ABOVE (80539)						1	*	PAOZZ
	T981-3-3	.	SEE ABOVE (97928)						1	*	PAOZZ
	SC2670-3-3	.	SEE ABOVE (06950)						1	*	PAOZZ
	D16175-10-3	.	SEE ABOVE (08524)						1	*	PAOZZ
9	396648	.	WASHER, CONICAL (89305) (MCDONNELL SPEC ST4M159-08)						1	*	PAOZZ
	448-3-2	.	SEE ABOVE (86968)						1	*	PAOZZ
10	AN960C8	.	WASHER						2		PAOZZ
11	466604-008	.	SCREW, EXTERNALLY RELIEVED BODY (89305) (MCDONNELL SPEC ST3M560-5)						1	*	PAOZZ
	MA3560-5	.	SEE ABOVE (58845)						1	*	PAOZZ
	1AM121070-5	.	SEE ABOVE (58251)						1	*	PAOZZ
	FIT7043-5	.	SEE ABOVE (58998)						1	*	PAOZZ
12	396974	.	WASHER, CONICAL (89305) (MCDONNELL SPEC ST4M159-3)						1	*	PAOZZ
	448-3-3	.	SEE ABOVE (86968)						1	*	PAOZZ
13	AN960C10L	.	WASHER						1		PAOZZ
14	466604-010	.	SCREW, EXTERNALLY RELIEVED BODY (89305) (MCDONNELL SPEC ST3M560-6)						1	*	PAOZZ
	MA3560-6	.	SEE ABOVE (58845)						1	*	PAOZZ
	1AM121070-6	.	SEE ABOVE (58251)						1	*	PAOZZ
	FIT7043-6	.	SEE ABOVE (58998)						1	*	PAOZZ
15	396973	.	WASHER, CONICAL (89305) (MCDONNELL SPEC ST4M159-06)						1		PAOZZ
	449-3-1	.	SEE ABOVE (86968)						1	*	PAOZZ
16	AN960C6	.	WASHER						2		PAOZZ
17	466604-006	.	SCREW, EXTERNALLY RELIEVED BODY (89305) (MCDONNELL SPEC ST3M560-4)						1	*	PAOZZ
	MA3560-4	.	SEE ABOVE (58845)						1	*	PAOZZ
	1AM121070-4	.	SEE ABOVE (58251)						1	*	PAOZZ
	FIT97043-4	.	SEE ABOVE (58998)						1	*	PAOZZ

**Figure 2. Center Wing Fuel Quantity Transmitter - 472995-413
(5A-U038 or 5A-V042) (Sheet 5)**

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

@ 472995-413 AND 472995-313 ARE
INTERCHANGEABLE, 472995-413
IS PREFERRED.

**Figure 2. Center Wing Fuel Quantity Transmitter - 472995-413
(5A-U038 or 5A-V042) (Sheet 6)**

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
WING FUEL QUANTITY TRANSMITTER (5A-U037 OR 5A-V041)
FUEL QUANTITY SYSTEM

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Maintenance Precautions and General Preparation	WP013 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Plane Captain Manual	A1-F18AC-PCM-000

Alphabetical Index

Subject	Page No.
Illustrated Parts Breakdown	3
Installation	2
Removal	1

Record of Applicable Technical Directives

None

Support Equipment Required

NOTE

Nomenclature	Part Number or Type Designation
Torque Wrench, 0 to 25 Inch-Pounds	-

This procedure is typical for left or right transmitter.

1. REMOVAL.

a. Defuel wing per substeps below:

(1) Do or observe defueling precautions (A1-F18AC-PCM-000).

(2) Apply electrical power (A1-F18AC-LMM-000).

Materials Required

None

(3) On cockpit FUEL QTY indicator, set FUEL QTY selector to INTR WING (figure 1).

(4) Monitor FUEL QTY indicator.

(5) Defuel aircraft (A1-F18AC-PCM-000) until LEFT and RIGHT counters on FUEL QTY indicator displays 0000.

(6) Remove electrical power (A1-F18AC-LMM-000).

b. Do or observe applicable fuel tank maintenance precautions (WP013 00).

c. Remove door 77L or 77R (A1-F18AC-LMM-010).

d. Remove foam (1, 2, and 3, figure 1 or figure 2, sheet 2).

e. On 472995-308 transmitter, do substeps below:

(1) Remove bolt (4, figure 1, sheet 2), nut (10) and clamps (5 and 6).

(2) Support transmitter (7) and remove bolt (8).

(3) Remove clamp (9, detail A) and bolt (11).

(4) Remove screws (13, 14, and 16) and remove transmitter (7).

f. On 472995-408 transmitter left side, do substeps below:

(1) Support transmitter (4, figure 2, sheet 2) and remove bolt (5).

(2) Remove clamp (7) and bolt (6).

(3) Remove screws (14, 17, and 20, detail A) and remove transmitter (4, sheet 2).

g. On 472995-408 transmitter right side, do substeps below:

(1) Remove bolt (11, figure 2, sheet 3), nut (9), and clamps (8 and 10).

(2) Remove screws (14, 17, and 20, detail A) and remove transmitter (4, sheet 3).

h. To prevent contamination cover door opening with door 77L or 77R.

2. INSTALLATION.

a. If installing transmitter on right side, rotate mounting clamp 180° per substeps below:

(1) Loosen nuts on metal clamps holding terminal block.

(2) Rotate mounting clamp to next detent.

(3) Retighten nuts on metal clamps.

b. On 472995-308 transmitter, do substeps below:

(1) Remove strain relief clamp and screw supplied with transmitter and replace with clamp (9, figure 1, detail A) and bolt (11).

(2) Attach wires with screws to terminal block of transmitter (7) as listed below: (QA)

(a) Torque screw (14) to 7 inch-pounds.

(b) Torque screw (13) to 12 inch-pounds.

(c) Torque screw (16) to 16 inch-pounds.

NOTE

Make sure terminal block of transmitter (7) is positioned inboard and mounting clamp is rotated forward and locked in position.

(3) Install clamp (9), bolt (11), and wire bundle.

(4) Install bolts (8, sheet 2) in transmitter (7).

(5) Position clamps (5 and 6) so that wire bundle clears transmitter (7) by 0.4 inch minimum, then install bolt (4) and nut (10).

c. On 472995-408 transmitter left side, do substeps below:

(1) Remove strain relief clamp and screw supplied with transmitter and replace with clamp (7, figure 2, sheet 2) and bolt (6).

(2) Attach wires with screws to terminal block of transmitter (4, detail A) as listed below:

(a) Torque screw (20) to 7 inch-pounds.

(b) Torque screw (14) to 12 inch-pounds.

(c) Torque screw (17) to 16 inch-pounds.

(3) If positive terminal lug contact is not made add washers (13, 16, and 19).

(4) Route wire bundle through clamp (7, sheet 2) and install bolt (6).

NOTE

Make sure terminal block of transmitter (4) is facing inboard and mounting clamp is rotated forward and locked in position.

(5) Install bolt (5) and transmitter (4).

d. On 472995-408 transmitter right side, do sub-steps below:

(1) Remove and discard clip and strain relief screw.

(2) Attach wires with screws to terminal block and transmitter (4, detail A) as listed below:

(a) Torque screw (20) to 7 inch-pounds.

(b) Torque screw (14) to 12 inch-pounds.

(c) Torque screw (17) to 16 inch-pounds.

(3) If positive terminal lug contact is not made add washers (13, 16, and 19).

NOTE

Make sure terminal block of transmitter (4, sheet 3) is facing inboard and mounting clamp is rotated forward and locked in position.

(4) Install bolt (11) and transmitter (4).

(5) Position clamps (8 and 10) so that wire bundle clears transmitter (4) by 0.4 inch minimum, then install bolt (11) and nut (9).

e. Install foam (1, 2, and 3, figures 1 or 2, sheets 2 and 3).

f. Install door 77L or 77R (A1-F18AC-LMM-010).

g. Connect utility and emergency battery connectors (WP013 00).

h. Inspect for correct transmitter (4 or 7) operation per substeps below:

(1) Remove no power tag from external power receptacle.

(2) Refuel aircraft using electrical power (A1-F18AC-PCM-000).

(3) On cockpit FUEL QTY indicator set FUEL QTY selector to INTR WING and observe that correct internal wing amount is displayed on LEFT or RIGHT counters (A1-F18AC-PCM-000).

3. ILLUSTRATED PARTS BREAKDOWN.

4. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

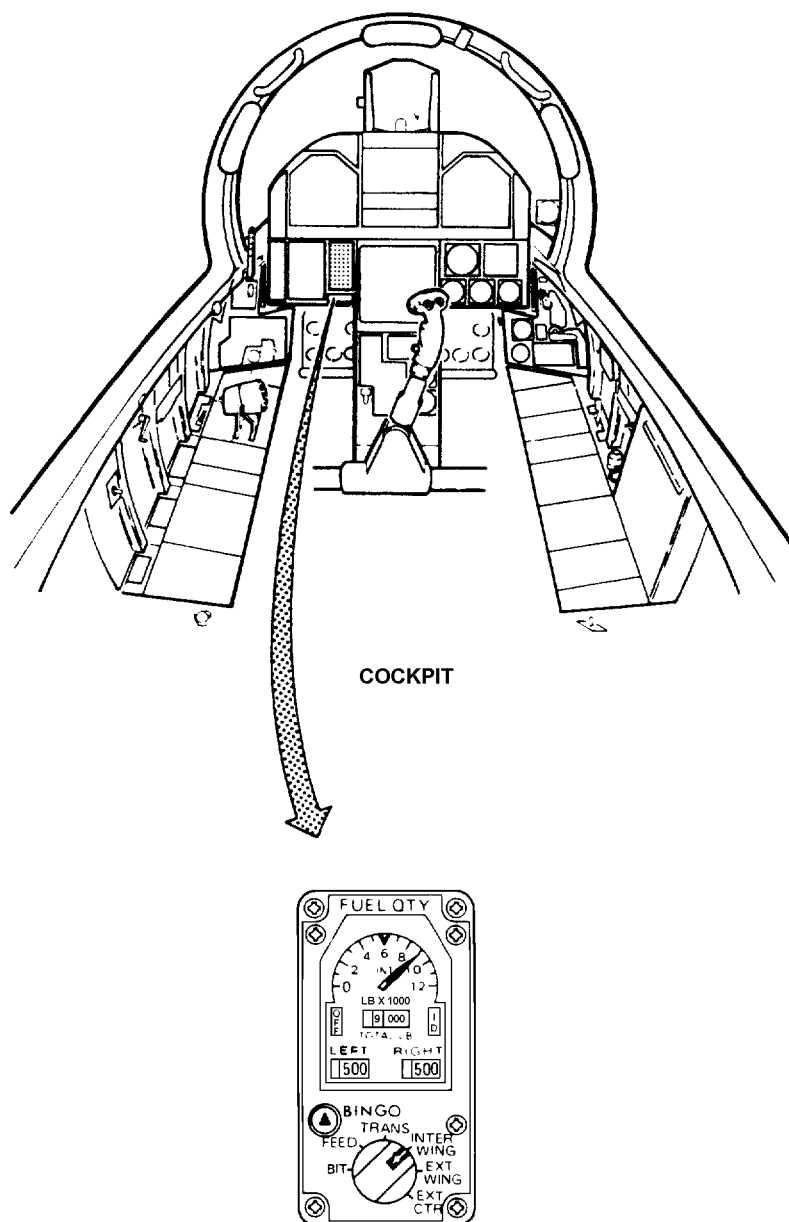
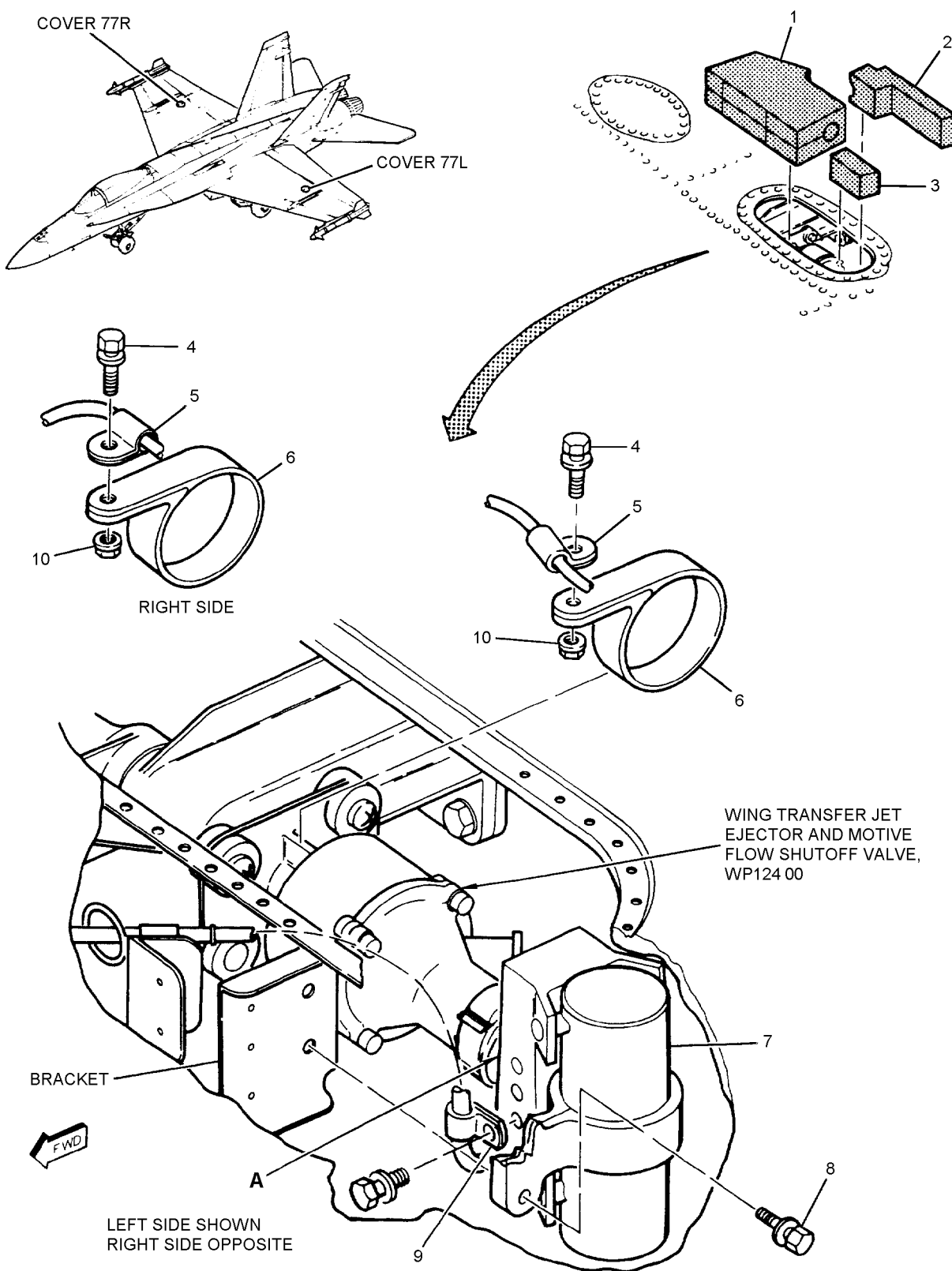


Figure 1. Outboard Wing Fuel Quantity Transmitter - 472995-308
(5A-U037 or 5A-V041) (Sheet 1)



**Figure 1. Outboard Wing Fuel Quantity Transmitter - 472995-308
(5A-U037 or 5A-V041) (Sheet 2)**

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		OUTBOARD WING FUEL QUANTITY									
		TRANSMITTER - 472995-308									
		(5A-U037 OR 5A-V041)									
1	74A584001-2039	.	FOAM - EXPLOSION SUPPRESSION, WING,						1		MDOZZ
		INNER (76301) (LEFT WING)									
	74A584001-2040	.	FOAM - EXPLOSION SUPPRESSION, WING,						1		MDOZZ
		INNER (76301) (RIGHT WING)									
2	74A584001-2037	.	FOAM - EXPLOSION SUPPRESSION, WING,						1		MDOZZ
		INNER (76301) (LEFT WING)									
	74A584001-2038	.	FOAM - EXPLOSION SUPPRESSION, WING,						1		MDOZZ
		INNER (76301) (RIGHT WING)									
3	74A584001-2041	.	FOAM - EXPLOSION SUPPRESSION, WING,						1		MDOZZ
		INNER (76301) (LEFT WING)									
	74A584001-2042	.	FOAM - EXPLOSION SUPPRESSION, WING,						1		MDOZZ
		INNER (76301) (RIGHT WING)									
4	VDP0002-5	.	BOLT, ASSEMBLED WASHER (06710)						1	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-5)									
	111026-3-5	.	BOLT, ASSEMBLED WASHER (80539)						1	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-5)									
	T981-3-5	.	BOLT, ASSEMBLED WASHER (97928)						1	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-5)									
	SC2670-3-5	.	BOLT, ASSEMBLED WASHER (06950)						1	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-5)									
	D16175-10-5	.	BOLT, ASSEMBLED WASHER (08524)						1	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-5)									
5	MS25281-2	.	CLAMP						1		PAOZZ
6	MS25281-R30	.	CLAMP						1		PAOZZ
7	472995-308 @	.	TRANSMITTER, LIQUID, OUTER WING						1		PAOZZ
		LEFT AND RIGHT (OUTBOARD WING									
		FUEL QUANTITY TRANSMITTER) (89305)									
		(MCDONNELL SPEC 74-580056-217)									
		(5A-U037 OR 5A-V041)									
8	VDP0002-5	.	BOLT, ASSEMBLED WASHER (AP) (06710)						2	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-5)									
	111026-3-5	.	BOLT, ASSEMBLED WASHER (AP) (80539)						2	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-5)									
	T981-3-5	.	BOLT, ASSEMBLED WASHER (AP) (97928)						2	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-5)									
	SC2670-3-5	.	BOLT, ASSEMBLED WASHER (AP) (06950)						2	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-5)									
	D16175-10-5	.	BOLT, ASSEMBLED WASHER (AP) (08524)						2	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-5)									
9	MS25281-2	.	CLAMP						1		PAOZZ
10	NAS1291C3M	.	NUT						1		PAOZZ
11	VDP0002-3	.	BOLT, ASSEMBLED WASHER (AP) (06710)						1	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-3)									
	111026-3-3	.	BOLT, ASSEMBLED WASHER (AP) (80539)						1	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-3)									
	T981-3-3	.	BOLT, ASSEMBLED WASHER (AP) (97928)						1	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-3)									
	SC2670-3-3	.	BOLT, ASSEMBLED WASHER (AP) (06950)						1	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-3)									

**Figure 1. Outboard Wing Fuel Quantity Transmitter - 472995-308
(5A-U037 or 5A-V041) (Sheet 4)**

INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USE ON CODE	SM&R CODE
		1 2 3 4 5 6 7			
	D16175-10-3	. BOLT, ASSEMBLED WASHER (AP) (08524)	1	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-3)			
12	396648	. WASHER, CONICAL (89305) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-08)			
	448-3-2	. WASHER, CONICAL (86968) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-08)			
13	466604-008	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(89305) (MCDONNELL SPEC ST3M560-5)			
	MA3560-5	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(58845) (MCDONNELL SPEC ST3M560-5)			
	1AM121070-5	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-5	. SEE ABOVE (58998)	1	*	PAOZZ
14	466604-006	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(89305) (MCDONNELL SPEC ST3M560-4)			
	MA3560-4	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(58845) (MCDONNELL SPEC ST3M560-4)			
	1AM121070-4	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-4	. SEE ABOVE (58998)	1	*	PAOZZ
15	396973	. WASHER, CONICAL (89305) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-06)			
	448-3-1	. WASHER, CONICAL (86968) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-06)			
16	466604-010	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(89305) (MCDONNELL SPEC ST3M560-6)			
	MA3560-6	. SCREW, EXTERNALLY RELIEVED BODY	1	*	PAOZZ
		(58845) (MCDONNELL SPEC ST3M560-6)			
	1AM121070-6	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-6	. SEE ABOVE (58998)	1	*	PAOZZ
17	396974	. WASHER, CONICAL (89305) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-3)			
	448-3-3	. WASHER, CONICAL (86968) (MCDONNELL	1	*	PAOZZ
		SPEC ST4M159-3)			

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

@ 472995-308 AND 472995-408 ARE
INTERCHANGEABLE, 472995-408
IS PREFERRED.

**Figure 1. Outboard Wing Fuel Quantity Transmitter - 472995-308
(5A-U037 or 5A-V041) (Sheet 5)**

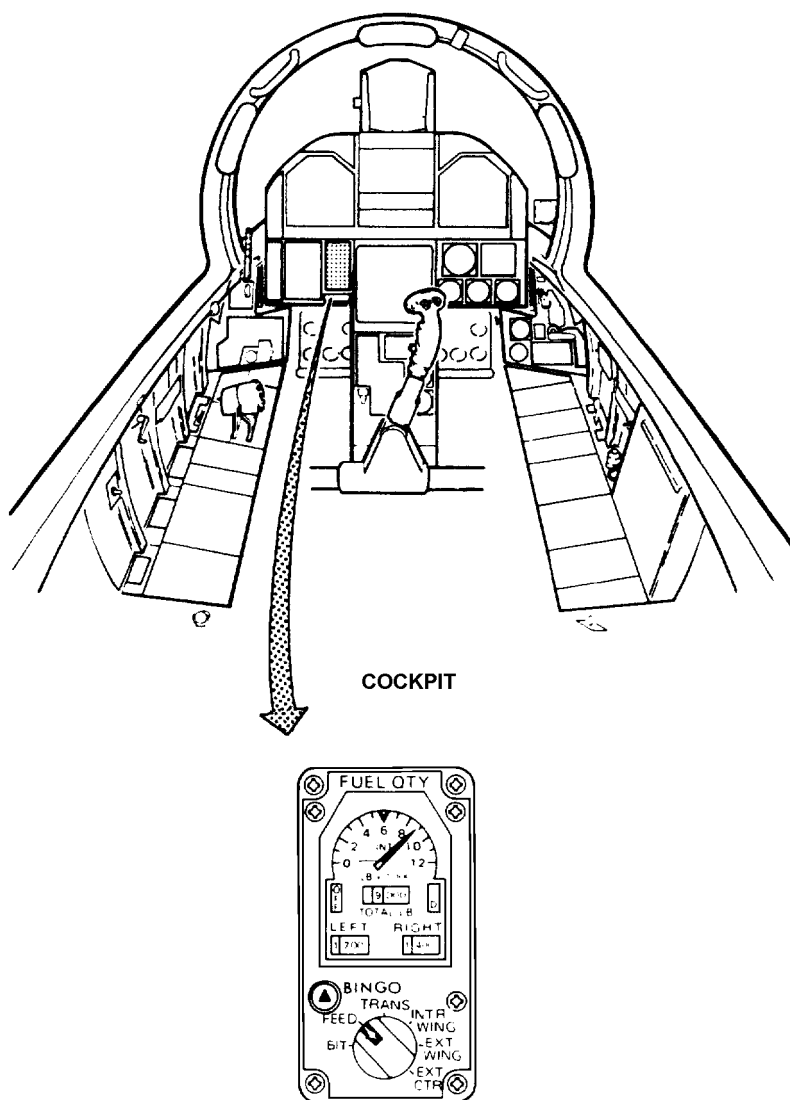


Figure 2. Outboard Wing Fuel Quantity Transmitter - 472995-408
(5A-U037 or 5A-V041) (Sheet 1)

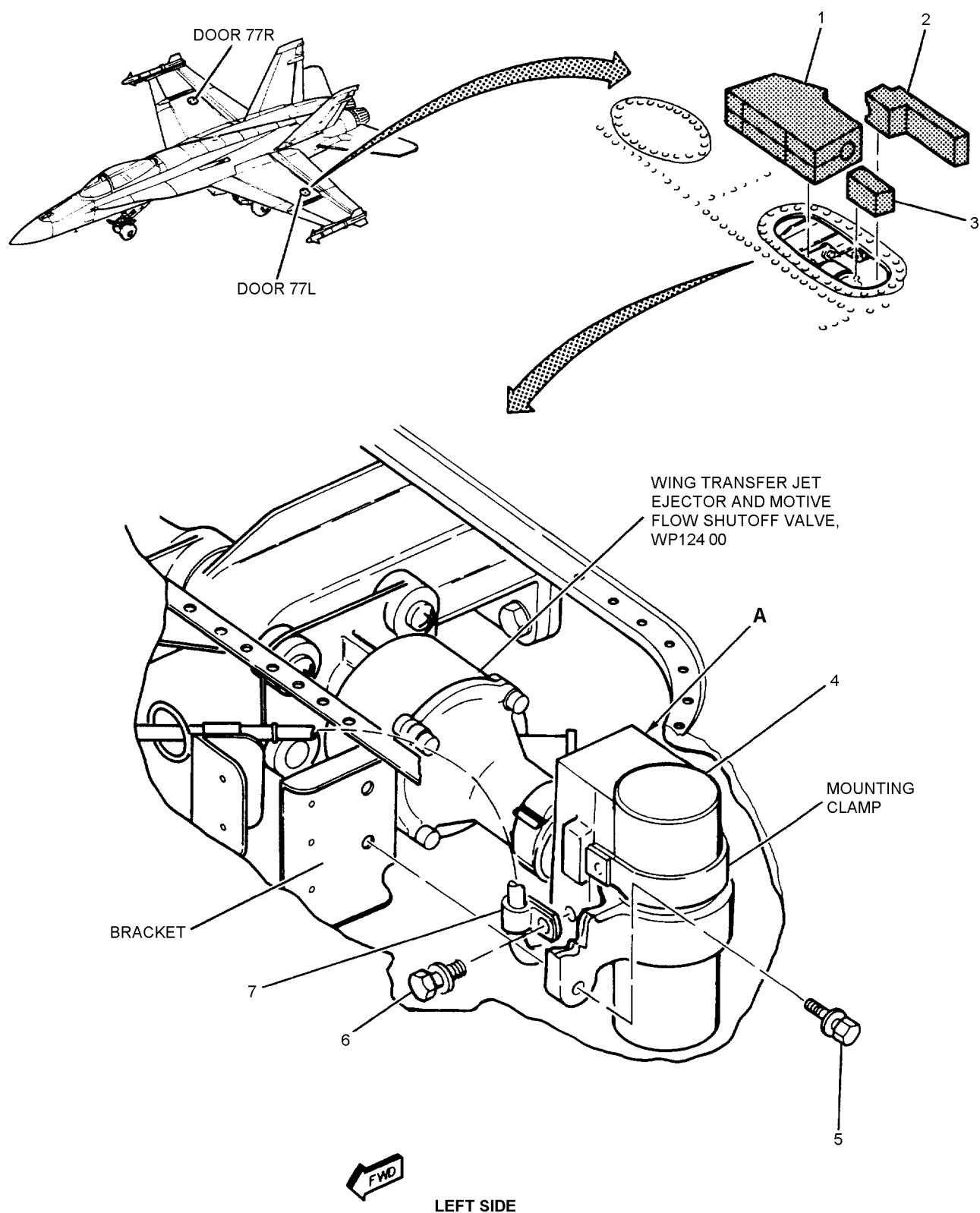
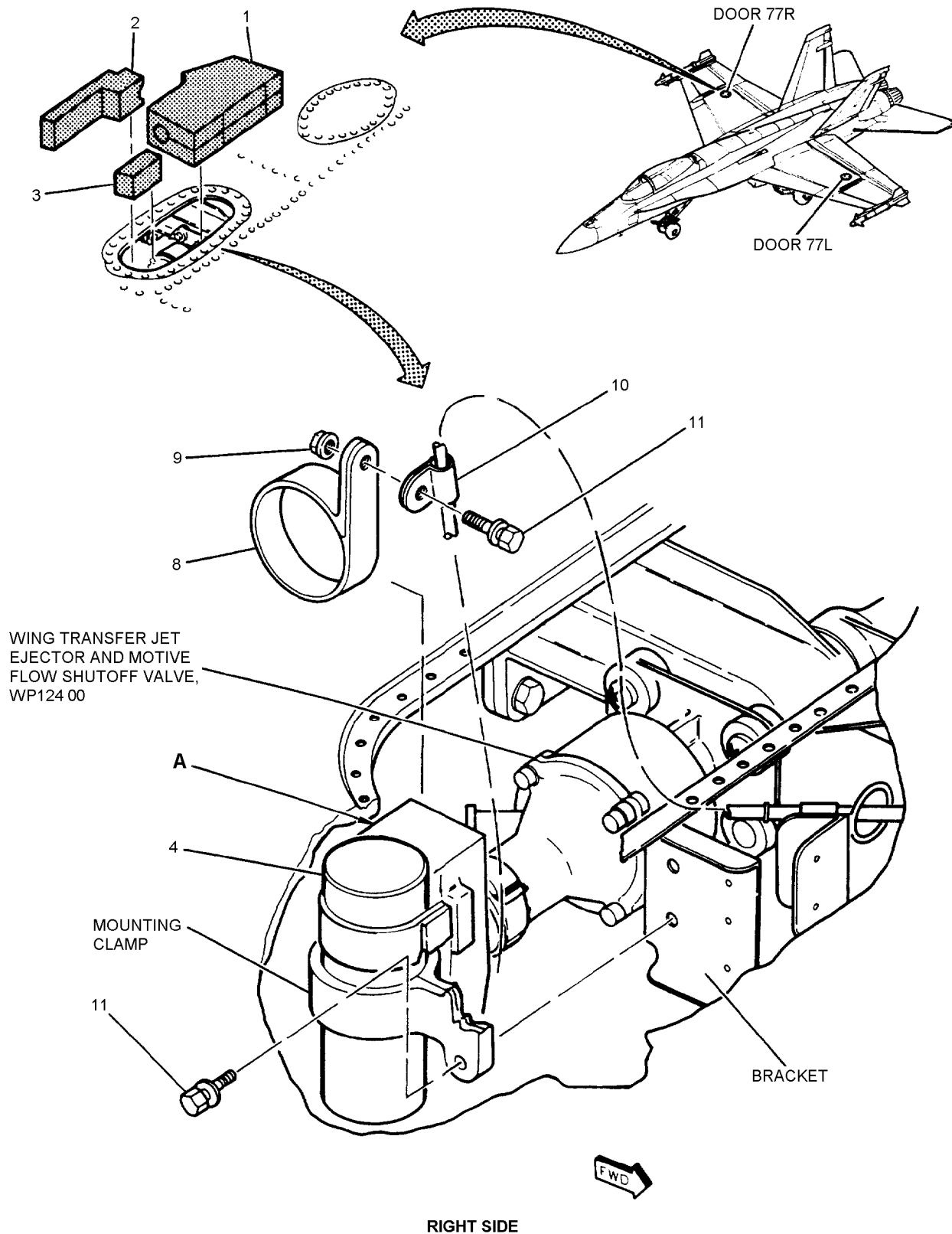


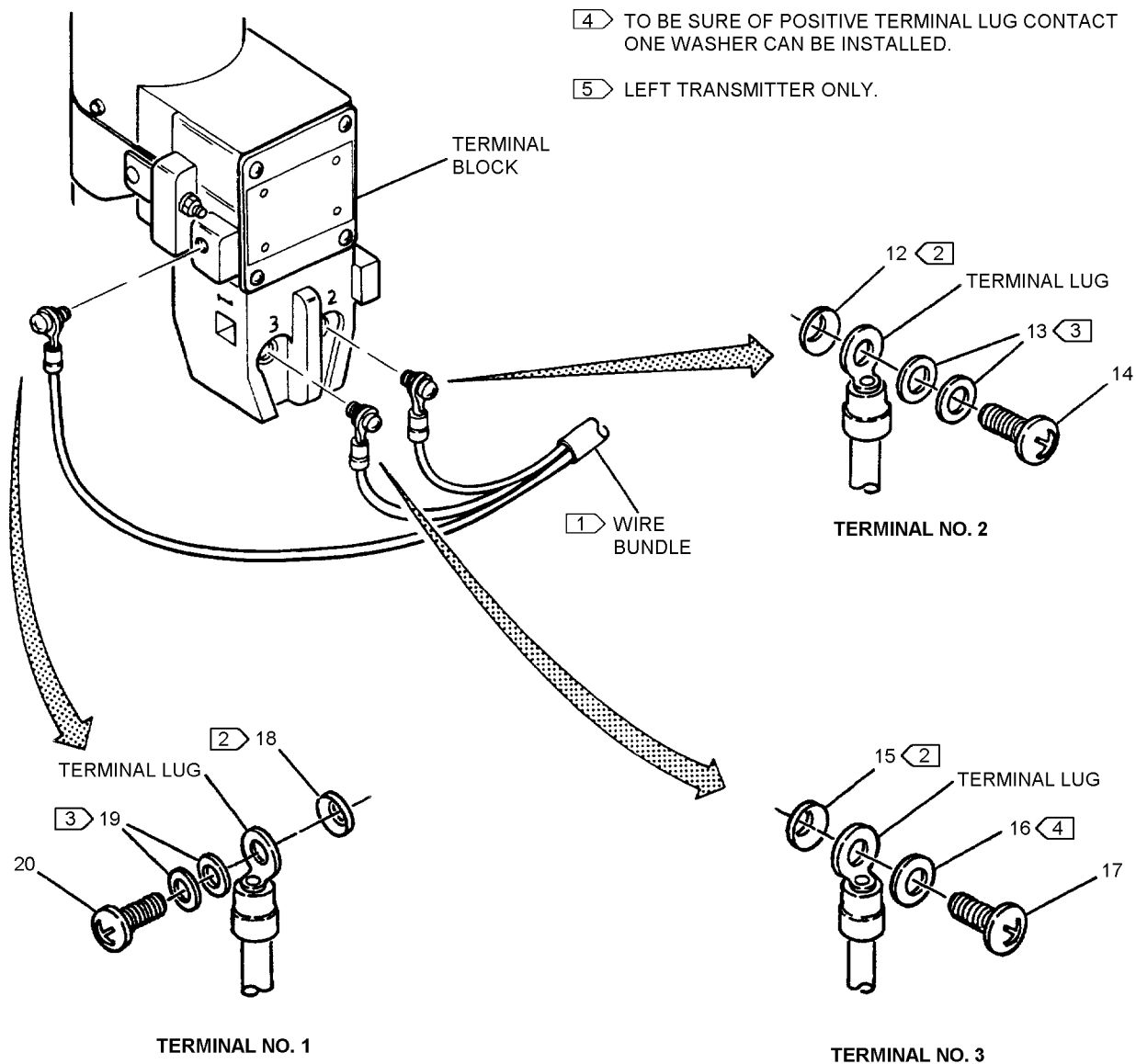
Figure 2. Outboard Wing Fuel Quantity Transmitter - 472995-408
(5A-U037 or 5A-V041) (Sheet 2)



**Figure 2. Outboard Wing Fuel Quantity Transmitter - 472995-408
(5A-U037 or 5A-V041) (Sheet 3)**

LEGEND

- 1 TO LOCATE WIRE TERMINAL REPAIR INFORMATION IN A1-F18AC-WRM-000 USE WRA REFERENCE DESIGNATOR AND TERMINAL NUMBER.
- 2 CONCAVE SIDE OF WASHER FACES TERMINAL LUG.
- 3 TO BE SURE OF POSITIVE TERMINAL LUG CONTACT TWO WASHERS MAXIMUM CAN BE INSTALLED.
- 4 TO BE SURE OF POSITIVE TERMINAL LUG CONTACT ONE WASHER CAN BE INSTALLED.
- 5 LEFT TRANSMITTER ONLY.



A

**Figure 2. Outboard Wing Fuel Quantity Transmitter - 472995-408
(5A-U037 or 5A-V041) (Sheet 4)**

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		OUTBOARD WING FUEL QUANTITY									
		TRANSMITTER - 472995-408									
		(5A-U037 OR 5A-V041)									
1	74A584001-2039	.	FOAM - EXPLOSION SUPPRESSION, WING,						1		MDOZZ
		INNER (76301) (LEFT WING)									
	74A584001-2040	.	FOAM - EXPLOSION SUPPRESSION, WING,						1		MDOZZ
		INNER (76301) (RIGHT WING)									
2	74A584001-2037	.	FOAM - EXPLOSION SUPPRESSION, WING,						1		MDOZZ
		INNER (76301) (LEFT WING)									
	74A584001-2038	.	FOAM - EXPLOSION SUPPRESSION, WING,						1		MDOZZ
		INNER (76301) (RIGHT WING)									
3	74A584001-2041	.	FOAM - EXPLOSION SUPPRESSION, WING,						1		MDOZZ
		INNER (76301) (LEFT WING)									
	74A584001-2042	.	FOAM - EXPLOSION SUPPRESSION, WING,						1		MDOZZ
		INNER (76301) (RIGHT WING)									
4	472995-408 @	.	TRANSMITTER, LIQUID, OUTER WING LEFT						1		PAOZZ
		AND RIGHT (OUTBOARD WING FUEL									
		QUANTITY TRANSMITTER) (89305)									
		(MCDONNELL SPEC 74-580056-217)									
		(5A-U037 OR 5A-V041)									
5	VDP0002-5	.	BOLT, ASSEMBLED WASHER (06710)						1	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-5)									
	111026-3-5	.	SEE ABOVE (80539)						1	*	PAOZZ
	T981-3-5	.	SEE ABOVE (97928)						1	*	PAOZZ
	SC2670-3-5	.	SEE ABOVE (06950)						1	*	PAOZZ
	D16175-10-5	.	SEE ABOVE (08524)						1	*	PAOZZ
6	VDP0002-3	.	BOLT, ASSEMBLED WASHER (06710)						1	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-3)									
		(LEFT SIDE ONLY)									
	111026-3-3	.	SEE ABOVE (80539)						1	*	PAOZZ
	T981-3-3	.	SEE ABOVE (97928)						1	*	PAOZZ
	SC2670-3-3	.	SEE ABOVE (06950)						1	*	PAOZZ
	D16175-10-3	.	SEE ABOVE (08524)						1	*	PAOZZ
7	MS25281-2	.	CLAMP (LEFT SIDE ONLY)						1		PAOZZ
8	MS25281-R30	.	CLAMP (RIGHT SIDE ONLY)						1		PAOZZ
9	NAS1291C3M	.	NUT						1		PAOZZ
10	MS25281-2	.	CLAMP (RIGHT SIDE ONLY)						1		PAOZZ
11	VDP0002-5	.	BOLT, ASSEMBLED WASHER (06710)						2	*	PAOZZ
		(MCDONNELL SPEC 3M881V3-5)									
	111026-3-5	.	SEE ABOVE (80539)						2	*	PAOZZ
	T981-3-5	.	SEE ABOVE (97928)						2	*	PAOZZ
	SC2670-3-5	.	SEE ABOVE (06950)						2	*	PAOZZ
	D16175-10-5	.	SEE ABOVE (08524)						2	*	PAOZZ
12	396648	.	WASHER, CONICAL (89305) (MCDONNELL						1	*	PAOZZ
		SPEC ST4M159-08)									
	448-3-2	.	SEE ABOVE (86968)						1	*	PAOZZ
13	AN960C8	.	WASHER						2		PAOZZ
14	466604-008	.	SCREW, EXTERNALLY RELIEVED BODY						1	*	PAOZZ
		(89305) (MCDONNELL SPEC ST3M560-5)									
	MA3560-5	.	SEE ABOVE (58845)						1	*	PAOZZ
	1AM121070-5	.	SEE ABOVE (58251)						1	*	PAOZZ
	FIT7043-5	.	SEE ABOVE (58998)						1	*	PAOZZ
15	396974	.	WASHER, CONICAL (89305) (MCDONNELL						1	*	PAOZZ
		SPEC ST4M159.3)									

**Figure 2. Outboard Wing Fuel Quantity Transmitter - 472995-408
(5A-U037 or 5A-V041) (Sheet 5)**

INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USE ON CODE	SM&R CODE
	448-3-3	. SEE ABOVE (86968)	1	*	PAOZZ
16	AN960C10L	. WASHER	1		PAOZZ
17	466604-010	. SCREW, EXTERNALLY RELIEVED BODY (89305) (MCDONNELL SPEC ST3M560-6)	1	*	PAOZZ
	MA3560-6	. SEE ABOVE (58845)	1	*	PAOZZ
	1AM121070-6	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-6	. SEE ABOVE (58998)	1	*	PAOZZ
18	396973	. WASHER, CONICAL (89305) (MCDONNELL SPEC ST4M159-06)	1	*	PAOZZ
	448-3-1	. SEE ABOVE (86968)	1	*	PAOZZ
19	AN960C6	. WASHER	2		PAOZZ
20	466604-006	. SCREW, EXTERNALLY RELIEVED BODY (89305) (MCDONNELL SPEC ST3M560-4)	1	*	PAOZZ
	MA3560-4	. SEE ABOVE (58845)	1	*	PAOZZ
	1AM121070-4	. SEE ABOVE (58251)	1	*	PAOZZ
	FIT7043-4	. SEE ABOVE (58998)	1	*	PAOZZ

* ALTERNATE OR EQUIVALENT PARTS.
(WP002 00)

@ 472995-408 AND 472995-308 ARE
INTERCHANGEABLE, 472995-408
IS PREFERRED.

**Figure 2. Outboard Wing Fuel Quantity Transmitter - 472995-408
(5A-U037 or 5A-V041) (Sheet 6)**

ORGANIZATIONAL MAINTENANCE
SYSTEM MAINTENANCE WITH IPB
LOW LEVEL SENSING CONTROL UNIT (5A-E053)
FUEL QUANTITY LOW LEVEL WARNING SYSTEM

Reference Material

Fuel System	A1-F18AC-460-200
Fuel Quantity Gaging and Low Level Warning System Test	WP024 00
Communications, Tacan, ADF, Electronic Altimeter, and IFF Systems	A1-F18AC-600-300
Computer-Transponder KIT-1A/TSEC	WP019 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captain Manual	A1-F18AC-PCM-000

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Installation	2
Removal	2
Low Level Sensing Control Unit - F/A-18B	2
Installation	2
Removal	2

Record of Applicable Technical Directives

None

1. LOW LEVEL SENSING CONTROL UNIT - F/A-18A.

Support Equipment Required

None

Materials Required

None

2. REMOVAL.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).

b. Remove door 18 (A1-F18AC-LMM-010).

c. Disconnect connector (5, figure 1) from control unit (4).

d. Remove bolts (1), washers (2), and control unit (4).

3. INSTALLATION.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).

b. Prepare mating surfaces of control unit (4, figure 1) and bracket for electrical bonding (A1-F18AC-LMM-000).

c. Install control unit (4), bolts (1), and washers (2).

d. Connect connector (5) to control unit (4).

e. Do PREPARATION and BIT TEST of fuel quantity gaging and low level warning system test (A1-F18AC-460-200, WP024 00).

f. Install door 18 (A1-F18AC-LMM-010).

4. LOW LEVEL SENSING CONTROL UNIT - F/A-18B.

Support Equipment Required

None

Materials Required

None

5. REMOVAL.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).

b. Open door 13L (A1-F18AC-LMM-010).

c. If installed, remove Computer-Transponder KIT-1A/TSEC (A1-F18AC-600-300, WP019 00).

d. Disconnect connector (1, figure 2) from control unit (2).

e. On 161714 AND UP, remove clamp (3), control unit (2) and attaching parts.

f. On 161354 THRU 161711, remove control unit (2) and attaching parts.

6. INSTALLATION.

a. Make sure electrical power is not applied (A1-F18AC-LMM-000).

b. Prepare mating surfaces of control unit (2, figure 2) and bracket for electrical bonding (A1-F18AC-LMM-000).

c. On 161714 AND UP, install clamp (3), control unit (2), and attaching parts.

d. On 161354 THRU 161711, install control unit (2) and attaching parts.

e. Connect connector (1) to control unit (2).

f. Do PREPARATION and BIT TEST of fuel quantity gaging and low level warning system test (A1-F18AC-460-200, WP024 00).

g. If applicable, install Computer-Transponder KIT-1A/TSEC (A1-F18AC-600-300, WP019 00).

h. Close door 13L (A1-F18AC-LMM-010).

7. ILLUSTRATED PARTS BREAKDOWN.

8. This illustrated parts breakdown has data required for identifying and ordering parts. The manual introduction has more information on IPB data.

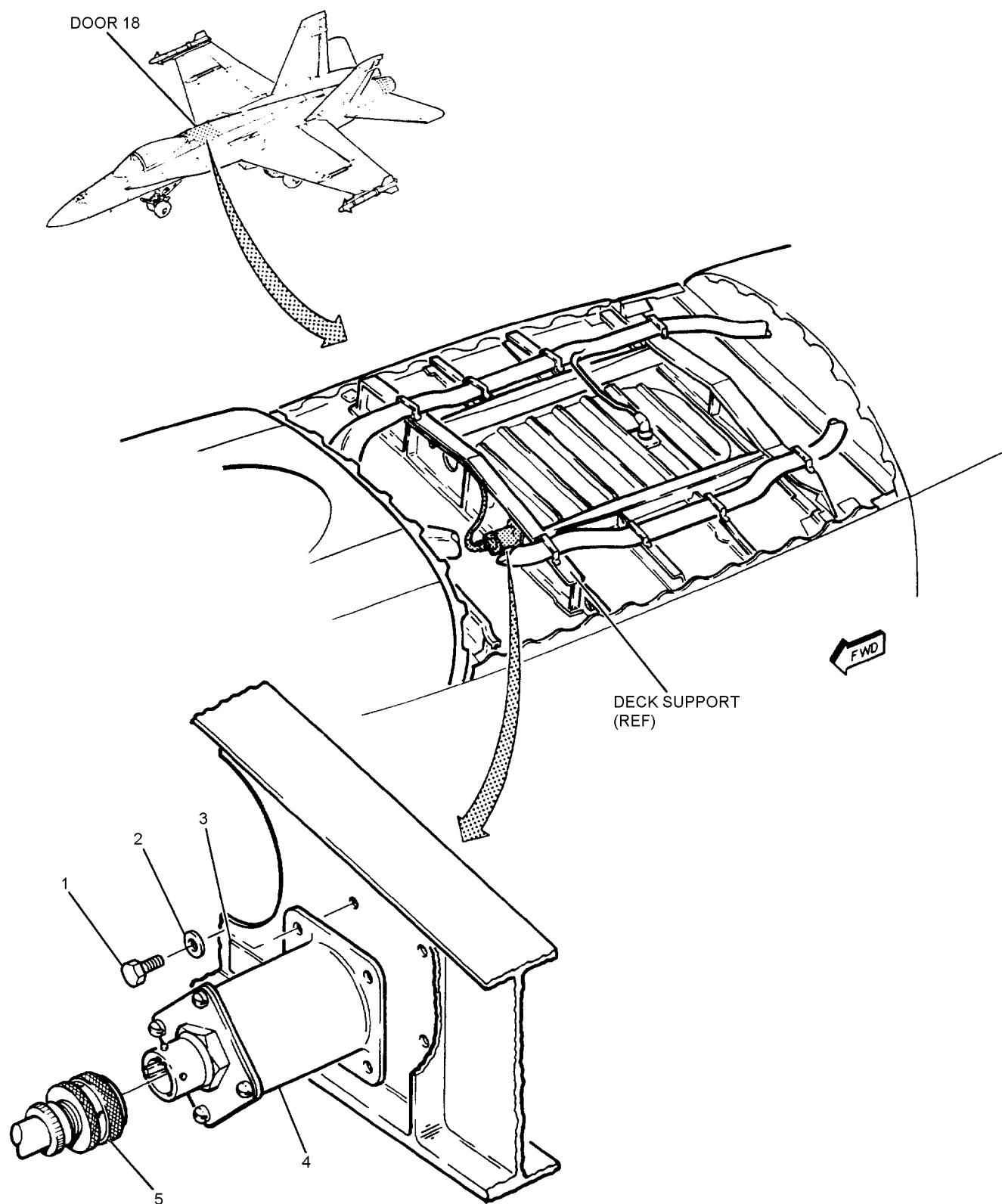


Figure 1. Low Level Sensing Control Unit (5A-E053) - F/A-18A (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		LOW LEVEL SENSING CONTROL UNIT									
		(5A-E053) - F/A-18A									
1	NAS673V3	.	BOLT						4		PAOZZ
2	AN960JD10L	.	WASHER						4		PAOZZ
3	74A890007-2059	.	PLATE, IDENTIFICATION (76301)						1		MDOZZ
4	472147-001	.	CONTROL, LEVEL SENSING (LOW LEVEL						1		PAOZZ
			SENSING CONTROL UNIT) (89305)								
			(MCDONNELL SPEC 68-580104-203)								
			(5A-E053)								
5	MS27467T13B35S	.	CONNECTOR, PLUG (5P-E053)						1		PAOZZ

Figure 1. Low Level Sensing Control Unit (5A-E053) - F/A-18A (Sheet 2)

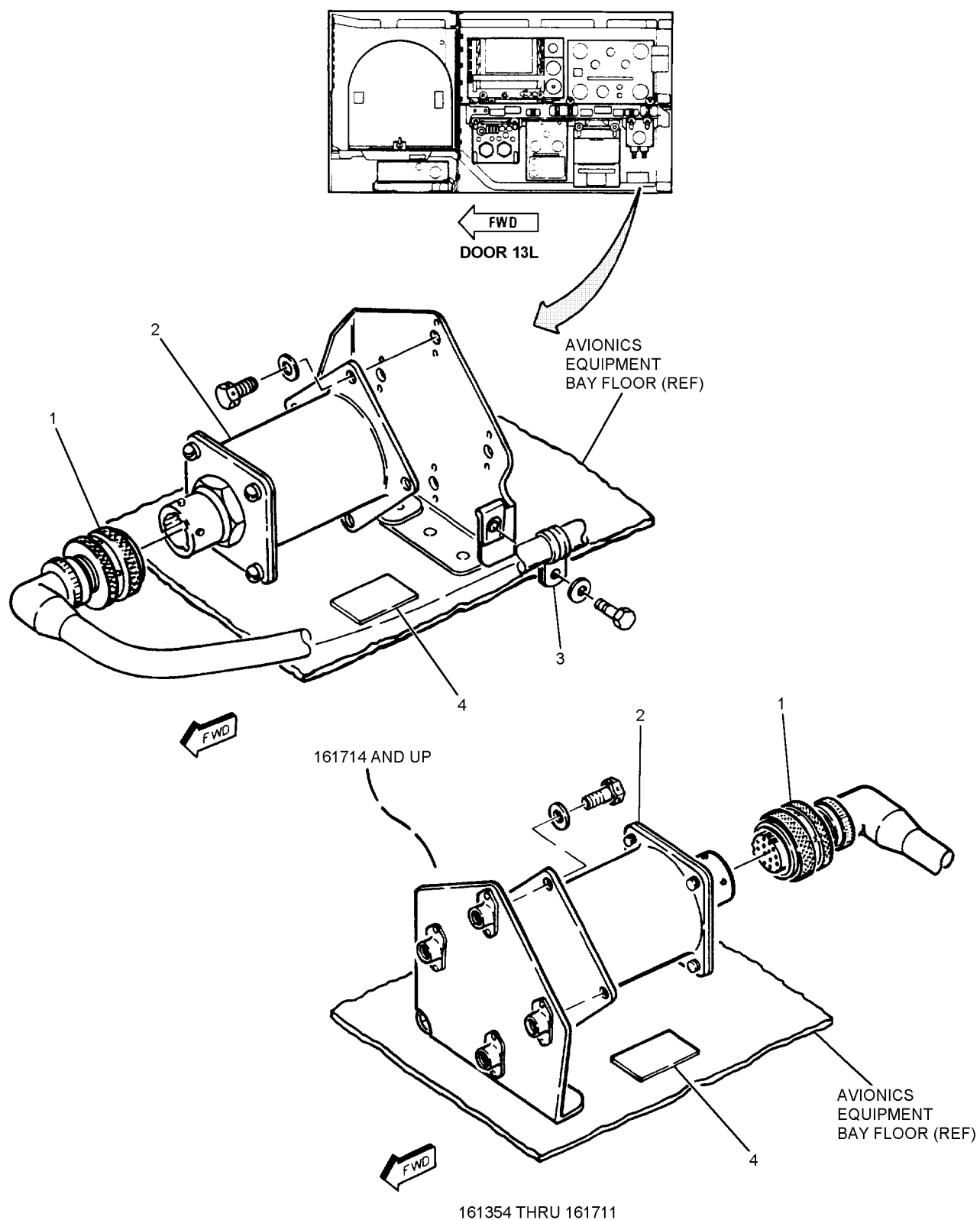


Figure 2. Low Level Sensing Control Unit (5A-E053) - F/A-18B (Sheet 1)

INDEX NO.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USE ON CODE	SM&R CODE
		1	2	3	4	5	6	7			
		LOW LEVEL SENSING CONTROL UNIT									
		(5A-E053) - F/A-18B									
1	MS27467T13B35S	.						CONNECTOR, PLUG (5P-E053)	1		PAOZZ
2	472147-001	.						CONTROL, LEVEL SENSING (LOW LEVEL	1		PAOZZ
		SENSING CONTROL UNIT) (89305)									
		(MCDONNELL SPEC 68-580104-203)									
		(5A-E053)									
	NAS673V5	.						BOLT (AP)	4		PAOZZ
	AN960JD10	.						WASHER (AP)	4		PAOZZ
3	MS21919WDG #	.						CLAMP	1	A	-
	NAS673V2	.						BOLT (AP)	1		PAOZZ
	AN960JD10L	.						WASHER (AP)	1		PAOZZ
4	74A890606-2001	.						PLATE, IDENTIFICATION (76301)	1		MDOZZ
# LENGTH/SIZE TO BE DETERMINED AT											
INSTALLATION.											
		CODE	USABLE ON			MODEL					
		A	161714 & UP			F/A-18B					

Figure 2. Low Level Sensing Control Unit (5A-E053) - F/A-18B (Sheet 2)